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

RE: RESPONSE TO NMED DISAPPROVAL REVISED INVESTIGATION REPORT
SOLID WASTE MANAGEMENT UNIT (SWMU) No. 1 AERATION BASIN AND SWMU No.14
OLD API SEPARATOR
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-13-001

Dear Mr. Kieling:

The enclosed Investigation Report was prepared pursuant to your letter dated May 11, 2015, which provided comments on the *Investigation Report Solid Waste Management Unit (SWMU) No.1 Aeration Basin and SWMU No. 14 Old API Separator.* In your May 11, 2015 disapproval letter, there were two sets of comments. The first set (Response to Comments, Comments) addressed some of the comments that were submitted by Western Refining Southwest, Inc. ("Western") regarding inconsistencies between NMED's comments on the preparation of investigation reports for the Bloomfield Terminal and the Gallup Refinery. The second set (June 2014 Revised Investigation Report Comments) are specific to the revised SWMU 1 and 14 Investigation Report. This letter responds to both of NMED's sets of comments. For reference, your comments are included below in italics followed by Western's response.

I. Response to Comments, Comments

NMED Comment 1

a) *The Permittee raises concerns regarding NMED's inconsistent review between Bloomfield Terminal and Gallup Refinery documents. NMED required Bloomfield to be more consistent in presenting data and required Gallup to present additional information and present that information more clearly. These two requirements do not constitute inconsistency. More specifically, in the response to NMED's Disapproval Comment 1, the Permittee presents an example of a comment regarding the Bloomfield's Group 2 Investigation Report and states that, "[b]ased on NMED's most recent comment, Western will eliminate the redundant soil information from Section 4.4 in this and all subsequent site investigation reports." NMED's Disapproval Comment 1 required the Permittee to remove redundant information regarding the soil investigation in the groundwater section of the Report because the Permittee simply copied Section 4.3 (Exploratory Drilling Investigations, Soil Sampling and Boring Abandonment) verbatim into Section 4.4 (Monitoring Well Construction and Groundwater Sampling). Relevant soil data information such as descriptions of the interval of saturation, the presence of potential contamination and its correlation to saturated intervals, and how that information relates to the locations of the monitoring wells and where formation water was sampled are relevant to the groundwater section. The Permittee is required to include all relevant information that may be helpful to the reviewer; the Permittee must continue to include relevant and useful details*

regarding soil in the monitoring well construction and groundwater sampling sections. However, it must be information that supplements the soil investigation section.

Western Response:
Western will continue to attempt to be responsive to NMED's comments; however, it is obvious that different reviewers do have different ideas as to the appropriate content of the various sections of the reports.

NMED Comment
b) *NMED's Disapproval Comment 1 also required the Permittee to "[i]nclude descriptions of the volume of water purged, field parameters measured and the results, identify the unit from which water was sampled, and discuss any other details which may aid in understanding the groundwater at the site." The Permittee references Appendix B (Field Methods) in Section 4.4; however, the Field Methods seem to relate only to the development of permanent well OAPIS-1. It is not clear whether or not the Permittee followed the same procedures to collect groundwater from soil borings where monitoring wells were not completed. Please include a description of the methods and procedures used to collect groundwater samples from soil borings either in Section 4.4 or in Appendix B. Also, please discuss the recharge rate in OAPIS-1.*

Western Response:
The methods used to collect groundwater samples from temporary well completions in soil borings is included in Appendix B. The recharge rate for soil boring SWMU 14-2, later completed as permanent well OAPIS-1, was very slow. As discussed in Section 4.4.2, the boring and temporary well screen was set on July 17, 2012 and it was not until the morning of July 19th that a sufficient volume of water had entered the well to allow sample collection.

NMED Comment 2
a) T*he Permittee's response to NMED's Disapproval Comment 2 states, "NMED provided a general reference to the NM SSLs (or EPA Regional Screening Levels as appropriate) as outlined in NMED's Risk Assessment Guidance and states, "[b]ecause groundwater in the area is affected by contamination, it is inappropriate to calculate a DAF for the site." Western requests clarification on this statement. Is it NMED's position/policy that for any SWMU and/or AOC that has groundwater in the area affected by contamination that no site specific DAF may be calculated to determine appropriate soil remediation levels? Is NMED requiring all sites in New Mexico to use DAF equal to 1.0 if there is groundwater contamination on the site, which is "in the area" of the subject soils?" A dilution attenuation factor (DAF) is used to calculate the potential risk of the soil contamination reaching groundwater. Specifically, it is utilized at a site when there is soil contamination, but groundwater contamination does not exceed the established cleanup levels. A DAF may also be used to demonstrate that soil is no longer a source or is a continuing source of contamination for groundwater (for example, if there has been soil remediation conducted, but a source of contamination remains in the soil). In general, NMED recommends using a conservative value of DAF 20 for most sites. A DAF 1 is used when contaminated soil is in direct contact with groundwater and is often overly conservative, depending on site conditions.*

Western Response:
Western appreciates the clarification regarding use of DAFs. Our experience has clearly shown that groundwater impacts are associated with primary sources (e.g., leaking tanks or pipelines)

and not minor secondary sources (e.g., stained soils with low concentrations of petroleum hydrocarbons, even well above DAF 20 values).

NMED Comment

b) *At the Aeration Lagoons, hazardous waste has been in direct contact with the groundwater. According to the Trihydro Report included with the subject Report, sediment measurements in AL-1 and AL-2 were 8-10 feet deep and groundwater ranges from 6-20 feet below the ground surface in the area of the lagoons. Additionally, groundwater at the OAPIS is shallow (around 11 feet below ground surface) and the soil contamination is present relatively deep below the ground surface, meaning that contamination is likely in contact with groundwater. Furthermore, in Section 7.1.1 (Aeration Basin) the Permittee states, "[t]he vertical impacts to soil were found to extend to the uppermost groundwater-bearing horizons in some borings around the Aeration Basin as discussed below" and then, in Section 7.1.2 (Old API Separator) the Permittee states, "[t]he vertical impacts to soil were found to extend to the uppermost groundwater-bearing horizons in borings SWMU 14-2 and SWMU 14-3." However, the screening described in the Report was based on the overall maximum concentration measured for each contaminant that exceeded its associated soil screening level(s). In a majority of analytical results, the overall maximum concentrations did not occur at depths that could contact groundwater. In addition, many sampling locations that included depths that could contact groundwater exhibited intermittent detections indicating that contamination was likely not continuous from the surface to the water table. Therefore, upon further examination, a DAF of 20 (or the calculated DAF of 461) is appropriate for screening the majority of the contaminants addressed in the Report and the Permittee shall therefore remove all references to DAF 1 from the Report.*

Western Response:

Western notes that the report refers to "vertical impacts to soil." Although Western does not accept NMED's observation that "hazardous waste has been in direct contact with groundwater," both the Aeration Basin and OAPIS have contained waste materials that was in direct contact with refinery wastewater and Western believes that this "impacted" water transported contaminants vertically through soils in some locations. A review of the soil borings for SWMU 1 and SWMU 14 does not indicate any of the soil borings encountered waste materials.

The reference to use of DAF 1 screening levels has been revised to note the DAF 1 values are only reference values used to calculate site-specific screening levels.

NMED Comment

c) *The results obtained from the screening analysis (risks for soil under a residential scenario at $1x10^{-3}$ exceed NMED target risk of $1x10^{-5}$ using DAF=461 while the hazard index is 1.5; for groundwater, the risk is again above $1xl0^{-3}$ and the hazard index is 910) indicate the SWMUs must be further evaluated (potentially, with a more detailed, site-specific risk assessment) and/or that remediation of soil and groundwater is necessary. The Permittee may calculate separate DAFs for each SWMU to aid in the assessment of soil contamination. In addition to calculating separate, site-specific DAFs, the Permittee may want to perform a screening analysis of the sediments in the Aeration Basin. These actions may be used to support final remedies at the sites. See also Response to Comments, Comment 8.*

Western Response:

Upon reviewing the DAF calculations, it appears the only factor that could have a significant impact on the DAF values when calculated separately for each SWMU is the "source length

parallel to groundwater flow." The current site-specific DAF of 461 assumes a source length of 100 meters and this is certainly very conservative for the Old API Separator when examined separately. However, due to the very close proximity of the two SWMUs Western has chosen to calculate one DAF value to ensure adequate protection across this area.

Based on previous characterization of the sediments, as provided in the TriHydro Report and process knowledge, Western assumes the sediments in the Aeration Basin will require that a remedy be implemented. A screening analysis does not appear to be warranted.

NMED Comment 5

NMED's Disapproval Comment 5 required the Permittee to provide, "a description of the design and composition of the berms, if available." The Permittee states that "[t]he design of the Aeration Basin, including the berms, has previously been submitted to the NMED and Western does not believe it would be beneficial to incorporate this design document into the site investigation report." For clarification, NMED does not require a design document; simply a description of how the berms were constructed, the content of the berms, and an estimate of how thick the layer of gravel is on top of the berms. Since the hand auger borings installed along the berms hit refusal at 6 inches, a description of whether or not there are multiple layers of gravel and how often gravel is added to the berms is critical. Additionally, the Permittee must provide a description of the type of vehicles driven onto the berms and whether or not that affects the integrity of the berms. Finally, the Permittee states that "[w]here gravel is present beneath the upper 0.5' to 1.0', it occurs in a silty clay matrix and the percentage of gravel is not sufficient to facilitate seepage through the dikes." NMED was unable to confirm this statement through the documentation provided. Please provide information regarding the percent of gravel present in the berms and how deep below the berm surface gravel is present.

Western Response:

The following description of the berm construction is taken from the *Technical Specifications for Construction of an Aerated Lagoon API Separator Effluent Treatment Facility* prepared by Geoscience Consultants, Ltd. On August 5, 1986. From the following design description, it is clear that Giant Industries took great care to ensure the berms were properly constructed to minimize any exfiltration from the Aeration Basin.

II-3. LAGOON EARTHWORK

A. Soils Testing and Inspection: The engineer shall supply to the contractor the results of a pre-construction soil study indicating the baseline modified proctor density, in accordance with ASTM 01557 or latest revision. Additional tests may be provided at the contractor's request and expense. These results shall be used as the basis for determination of acceptability of all compaction under this contract. During the course of construction, periodic checks of soil compaction will be made as directed by the Engineer to assure compliance with these specifications.

B. Clearing and Grubbing: The area within the limits shown on the drawings and extending a minimum of 5 feet beyond the embankment foundation limits shall be cleared of all objectionable material, to include trees, logs, stumps, brush, vegetation,

and rubbish to a minimum depth of 1 foot. Stumps and roots larger than 1 1/2 inches in diameter shall be removed to a depth of 3 feet below subgrade. Spoil material shall be collected and removed by the Contractor to a location selected by the Contractor and approved by the Engineer. The existing drain and transfer pipes shall be removed from the berm on the west side.

C. Excavation: Excavation shall be performed at such places as are "indicated on the drawings, and to the lines, grades and elevations shown. During the process of excavation, the grade shall be maintained in such condition that it will be well drained at all times. When necessary, temporary drains and drainage ditches shall be installed to intercept or divert surface water which may affect the prosecution or condition of the work. The rough excavation shall be carried to such depth that sufficient material will be left above the designated grade to a11ow for compaction to this grade. Should the Contractor through negligence or other fault excavate below the designated lines, he shall replace such excavation with approved material in an approved manner and condition, at his own expense. All soft or unstable material, and material which will not readily compact when rolled or tamped, shall be removed as directed by the Engineer, and replaced with suitable material. All sand lenses and other permeable zones will be excavated to a minimum depth of 2 feet below the finish grade and shall be removed and deposited adjacent to the lagoon site as directed by the Engineer. The top 6 inches of excavated areas comprising the final embankment sha11 be compacted to a density equal to 90% of maximum density as determined by the Modified Proctor Test, ASTM 01557 or latest revision. Such a sand lens is thought to exist on the east side as evidenced by a readily observed natural seep.

D. General Fill Methods: Prior to placement of compacted fill in any section, the foundation of such section shall be loosened thoroughly by scarifying, plowing or harrowing to a depth of 8 inches. After removal of roots or other debris turned up in the process of loosening, the entire surface of the area shall be compacted to 90% of maximum density as determined by the Modified Proctor Test, ASTM 01557 or latest revision. After an 8" loose layer of fill material has been deposited and spread, it shall be harrowed if required to break up and blend the materials, unless harrowing is to be performed to obtain uniform moisture distribution. Harrowing, if required, shall be performed with a spring-tooth harrow, or other approved harrow, to a depth of at least 8 inches. If one pass of harrowing does not accomplish the breaking up and blending of the materials, additional passes of-the harrow may be required. When the moisture content and the condition of the 1ayer is satisfactory, the lift shall be compacted to 90% of maximum density as determined by the Modified Proctor Test, ASTM 01557 or latest revision. Backfill placed adjacent to structures shall be compacted to 90% of maximum density as determined by the Modified Proctor Test, ASTM 01557 or latest revision. Portions of the fill which are not accessible to the

roller shall be placed in 8-inch layers and compacted to the required density by approved mechanical tampers.

E. Dike Embankments: The dike embankments shall be constructed with approved excavated material obtained from the lagoon site or nearby approved borrow sites, shall be p1aced in 8 inch thick layers and compacted to a density equal to 90% of that of the maximum dry density as determined by the Modified Proctor Test, ASTM 01557 or latest revision.

Compacted surfaces of fill materials shall be lightly scarified to break up stratification before the succeeding layer is placed upon it. When fill is placed against the existing slopes, the existing slopes shall be deeply benched to prevent construction of a slip surface. All embankments shall be filled and compacted as specified above, to the lines, grades and elevations as shown on the plans or as directed by the Engineer, with all surfaces trimmed and fine graded so as to produce a neat, regular appearance. Rolling of the embankment areas shall be done with an approved sheepsfoot or segmented steel wheeled compactor. Any irregularities or depressions that develop under rolling shall be corrected by loosening the material at these places and adding, removing or replacing material until the surface is smooth and uniform. Any portion of the area which is not accessible to a roller shall be compacted to the required density by approved mechanical tampers. All soft or unstable material and material which will not readily compact when rolled or tamped, shall be removed as directed by the Engineer, and replaced with suitable material. All permeable zones will be excavated to a minimum depth of 2 feet below the finish grade and shall be removed and deposited adjacent to the lagoon site as directed by the Engineer. The top 8 inches of excavated areas comprising the final embankment shall be compacted to a density equal to 90% of maximum density as determined by the Modified Proctor Test, ASTM 01551 or latest revision.

F. Lagoon Bottom: The lagoon bottom shall be constructed to the finished grade as shown on the drawings, and shall be as smooth as possible at all points. The bottom of the lagoon shall be checked for smoothness and accuracy with surveying instruments, and if any portion is found to vary more than two tenths (0.20) of a foot above or below the finished grade, such portions shall be scarified, reshaped and recompacted until the required accuracy is obtained. The top 8 inches of the lagoon bottom shall be scarified and compacted to a density equal to 903 of the maximum dry density as determined by the Modified Proctor Test, ASTM 01556 or latest revision. Compaction and rolling shall conform to all provisions as specified under "Dike Embankment". All soft and yielding material, and material which will not readily compact when rolled or tamped, shall be removed, and replaced with suitable material as directed by the Engineer. All sand lenses and other permeable zones will

be excavated to a minimum of 2 feet below finish grade and shall be removed and deposited adjacent to the lagoon site as directed by the Engineer. Backfill for these areas shall be obtained from the most select material encountered in excavation as designated by the Engineer.

G. Key Trench: To reduce the possibility of piping through the soils and to reduce settlement, a key trench shall be excavated a long the interior edge of the existing embankment on the western edge of the existing pond. The key trench should be a minimum of five (5) feet deep and a minimum of ten (10) feet in width at the base. The side slopes should be no steeper than 1 ½: 1 (horizontal: vertical). The bottom of the key trench should be moisture conditioned and compacted as described under "General Fill Methods". The key trench shall then be backfilled with controlled structural fill as detailed in "General Fill Methods". Schematic drawings of the key trench are presented in the plans. The foundation for the interior dikes shall be prepared as described in in "General Fill Methods" and as directed by the engineer.

H. Sludge Drains Protection: Since there is a potential for seepage or leakage along the sludge drain pipes, it is necessary that the pipes be supported by at least two (2) feet of controlled structural fill as described under "General Fill Methods". This fill zone shall consist of either excavated and recompacted foundation soils or borrow soils from other areas on the site. The excavation and recompaction shall extend at least two (2}} feet beyond the perimeter of the pipes. Prior to replacement of excavated soils, the moisture conditioning and densification treatment described under "General Fill Methods" shall be performed along the sludge drain alignments. The recompacted materials should be placed at optimum moisture content (± 2%} and compacted to a dry density of at least 90% of the maximum dry density as determined in accordance with ASTM D-1557.

As a further control of seepage along the sludge trains, seepage collars shall be installed along the drain pipes as described in "Special Structures".

In addition to the hand auger locations that were originally intended to only penetrate to a depth of 2 feet, 17 deeper soil borings were completed around the perimeter of the Aeration Basin through the berms using a hollow-stem auger drilling rig. In addition, three existing monitoring wells were also drilled through the berms. From examination of these boring logs, it is possible to obtain a very good understanding of the materials of which the berms were made. The surface interval with gravel present is limited to the upper 2 feet and it is generally described as "silty clay with gravel present." Some borings (e.g., SWMU 1-9 and 1-10) indicate the gravel is concentrated in the upper 6 inches. An evaluation of the deeper intervals show some borings indicate a "trace" of gravel present at greater depths (e.g., 8-10' in boring SWMU 1-4) and this is commonly associated with presence of sand also, but in some instances the gravel sized particles are found within a clay matrix.

Some areas of the berms are capable of handling vehicular traffic up to the size of pickup trucks and this would normally be the only vehicular traffic on the berms. Occasional driving of vehicles on the berms will only increase the compaction of the clayey soils and there is no indication it has affected the integrity of the berms in a negative manner.

NMED asked questions related to the potential for the presence of gravel in the clay soils to a allow seepage through the dikes. Western offers the following observations to help address NMED's concerns over the presence of gravel sized material in the predominantly clay berms.

- The gravel that was added to the surface of the dikes, which is reflected in the many soil borings as being concentrated near the land surface, was above the historic water levels during operation of the Aeration Basin and seems very unlikely to have affected contaminant migration.
- During the operational life of the Aeration Basin there were no indications of any seepage along the western and northern sides of the Aeration Basin where the berms are above grade.
- Monitoring wells GWM-2 and GWM-3 were installed immediately adjacent to the Aeration Basin in the berms for the sole purpose of determining if water was present in the shallower soils and NMED should have all of the related information that did show the presence of limited quantities of water present in the more permeable screened intervals. It is noted that as the water levels decreased in the Aeration Basin after it was taken out of service there was a corresponding decrease in water levels in some of the adjacent wells.
- If there was a correlation between the presence of gravel sized material in the predominantly clayey soils and water permeation through the berms, then this would be shown in the many borings that surround the aeration basin. Western has not seen this correlation. What is obvious, is that the presence of silt and sand is associated with the presence of saturation where the more permeable sediments occur below the historic operational water levels of the Aeration Basin. However, the silt and sand deposits are discontinuous near the Aeration Basin as indicated in Figures 7 and 8.

NMED Comment 7

a) *NMED's Disapproval Comment 7 required the Permittee to use "unknown oil" for comparison, because unknown oil covers the full hydrocarbon range and is the most conservative standard. The Permittee presents their case for using the motor oil standard for comparison as well as the unknown oil standard. NMED agrees that it is important to analyze for the full range of total petroleum hydrocarbons (TPH) (gasoline range organics (GRO), motor oil range organics (MRO), and diesel range organics (ORO)). However, because there is no way to know the types of material that have entered the environment over time, the unknown oil standard is the most conservative standard and the most appropriate one to use for comparison. The Perrnittee may perform fingerprint analysis to determine the type of oil present in the soil and then use the appropriate standard once the oil type is confirmed.*

Western Response:

Western is interested in NMED's suggestion to perform fingerprint analyses and would like to discuss this further and hopefully obtain examples from NMED of how other Permitees have used fingerprint analyses to determine site-specific screening levels with NMED's approval of the methodology and any associated calculations. Western would note that when it comes to analyses for TPH, it is less important to know what the original release material was but rather

what constituents remain in the subject environmental medium today, thus the analyses for GRO, DRO and MRO that are capable of providing fractionation of the TPH.

NMED Comment

b) *The Permittee states, "[t]he analysis for motor oil range organics only analyzes for >C-28 - C35 hydrocarbons. There is not overlap between this range of petroleum constituents and those used to represent unknown oil (i.e., C 11-C22). In other words, the petroleum hydrocarbons reported by the motor oil range organics cannot and does not include the C11- C22 hydrocarbons used to represent unknown oil. Therefore, an analysis for motor oil range organics should not be evaluated for environmental impacts by using toxicity for a totally unrelated carbon range." The ranges may not overlap, but the difference in the numbers is not very large. The Permittee also states, "[a] review of NMED's Table 6-1 reveals there is only one product type that does not include significant percentages of carbon ranges that cannot be present in the motor oil range analysis and this [is] "waste oil." The motor oil range analysis covers >C28 to C35 and waste oil composition is based on C19-C36 aliphatics, therefore, it is possible for the motor oil range analysis to detect the presence of hydrocarbons represented by the waste oil product type. Based on these facts, Western compares the analytical results from the motor oil range analyses to the screening levels for waste oil. Western requests that NMED reconsider their comment; no changes have been made to the data tables." The Report indicates that a large proportion of the detected contamination falls within the diesel range, which generally corresponds to the range of "unknown oil" in NMED guidance; therefore, the most conservative screening level is the most appropriate screening level to use. The Permittee must analyze for the full range of TPH (MRO, DRO, and GRO) and must use the "unknown oil" standard for comparison and revise the tables as necessary.*

Western Response:

Western has revised the tables per NMED's comments and the discussion in Section 5 has been revised accordingly. Also the screening for detection of TPH in groundwater has been updated to reflect the fact that NMED has rescinded the TPH screening levels for groundwater in lieu of individual constituents. The discussion in Sections 6.2.1 and 6.2.2 is revised. Tables 7, 8, 9, and 10 have been revised accordingly. As noted above, we are interested in discussing the use of fingerprint analyses and do stand by our position regarding the proper comparison of NMED screening levels to the method 8015 TPH analyses for DRO vs. GRO.

NMED Comment

c) *The laboratory data from MRO analysis contains variable detection limits and some detection limits that exceed the 3000 mg/kg screening level for waste oil; the Permittee must review the laboratory case narrative and demonstrate that this data is useable.*

Western Response:

The data review was completed and provided in Appendix F; the data are usable. Western has identified two samples [SWMU 1-1 (2-4') and SWMU 14-5 (1.5-2')] that had reporting limits above the 3,000 mg/kg screening level. In both instances, the reporting limits for MRO are elevated because of the high concentrations of DRO in the samples. As discussed below, if necessary, Western proposes to meet with NMED and have a laboratory representative attend the meeting to help address NMED's comments regarding data quality.

NMED Comment

d) *In many cases, the Permittee sampled from 0-0.5' and then 1.5-2' below ground surface and analytical data indicate that there is an increase in contamination with depth. NMED*

understands that the Permittee plans to propose conducting additional sampling to further define the vertical extent of contamination. NMED concurs with this approach.

Western Response:
None required.

NMED Comment
e) *Table 9 (Aeration Basin Groundwater Analytical Results Summary) does not report screening levels for DRO, GRO, or MRO. In addition, the Permittee does not depict the exceedance values in bold which is defined in the footnotes as values exceeding the screening level. Revise Table 9 and Table 10 to include the screening levels, define the units for all analytes in the table, and highlight soil screening exceedances.*

Western Response:
The screening levels for DRO, GRO and MRO were recently removed by NMED from their most recent (December 2014) *Risk Assessment Guidance for Site Investigation and Remediation*. The analytical results will continue to be reported, as discussed in the report. Tables 9 and 10 are revised to remove reference to groundwater TPH screening levels.

NMED Comment 8
a) *NMED's Disapproval Comment 8 stated that it "makes more sense to separate the Aeration Basin and the OAPIS for cumulative risk calculations." The Permittee's response states, "Western included both SWMUs in the same cumulative risk evaluation based on previous NMED comments, which Western understood to request that cumulative evaluations should, at least in some situations, include more than only a single SWMU or area of concern." The Permittee goes on to give an example from the Bloomfield Terminal. It is not appropriate to implement a universal approach that does not take into account differences between the two facilities. At Bloomfield, the SWMUs are typically small and essentially co-located. It is difficult to discern which SWMU contributed to the overall contamination in the area; therefore, it made sense to combine them. In some cases, it is not best to combine SWMUs, because contamination present at one SWMU could result in the failure of both SWMUs to pass a risk screening evaluation. The decision to combine or separate SWMUs includes the sizes and locations of the SWMUs, contaminant history and whether there is potential for coalescing contamination or contamination that cannot definitively be attributed to one SWMU or the other. The end goal of calculating risk is to be protective of human health and the environment which often requires using a more conservative approach. The Permittee and NMED can work together to assess which approach makes the most sense on a case-by-case basis.*

Western Response:
NMED's recommendation to evaluate this on a case-by-case basis makes sense. Based on NMED's related comments Western revised the previous calculations to separate the two SWMUs in the June 2014 revised Report.

NMED Comment
b) *Analytical results demonstrate that contaminants likely migrated from SWMU 14 to SWMU 1 over time. Groundwater contamination associated with both SWMUs features eight constituents (seven organic compounds and DRO) that exceed screening levels. Six of the same organic constituents (five specific constituents and DRO) are found at both SWMUs. Eleven metals exceed screening levels at SWMU 1 compared to SWMU 14. SWMU 1 metals concentrations are generally higher while SWMU 14 organic constituents are higher. Soils appear to contain higher organic contaminant concentrations at SWMU 14 and a higher number*

of contaminants were detected at concentrations greater than their associated screening levels. It may make more sense to evaluate the SWMUs separately based on this information. The Permittee estimated cumulative risk and hazard using the maximum detected concentration over both SWMUs. Thus, soil risk and hazard estimates are biased towards SWMU 14 contamination. Groundwater contamination due to metals is primarily attributable to SWMU 1 while organics associated with SWMU 14 appears to be the main source of groundwater contamination. In this case it is possible to delineate sources of contamination, warranting separation of SWMUs 1 and 14.

Western Response:
The tables were previously revised in June 2014 to provide separate calculations.

NMED Comment
c) *The data indicates the most contaminated sample from SWMU 1 is from soil boring SWMU 1-1 (2-4'), which is near the OAPIS and may be more representative of contamination at the OAPIS than the Aeration Lagoon. However, analytical data from boring SWMU 1-1 (2-4') must be included with both the OAPIS and Aeration Basin risk calculations as it may be representative of both sites. The Permittee must provide a description of the conveyance equipment connecting the OAPIS to the Aeration Lagoons and the discharge from the truck stop. Section 4.2 (Subsurface Conditions) mentions that there are two pipes buried at shallow depth near the OAPIS, but Figure 3 does not depict the location of soil boring SWMU 1-1 and Figure 2 does not include the location of the pipes. Provide a figure depicting both SWMUs 1 and 14, physical features such as pipe locations, former ancillary equipment and structures (including the benzene air strippers), roads, and boring locations.*
See also General Comment 2.

Western Response:
Although Western previously revised the risk calculations to provide separate calculations for each SWMU as directed in NMED's earlier comments, we have made additional changes to include data for soil sample SWMU 1-1 (2-4') in the cumulative soil risk calculation for both SWMUs. The discussion in Section 7.1 is revised along with Table 13.

Figures 2 and 3 have been revised to add the former pipelines from the OAPIS to the Aeration Basin, former piping from the New API to the benzene strippers and the Aeration Basin, and former discharge pipe from the Pilot Truck Stop. Figure 7A has been revised to add all of the soil borings for SWMU 14 and the former ancillary equipment. Figure 7A now shows all sample locations for both SWMUs on one figure.

NMED Comment
d) *Given the high risk estimates, a more detailed screening analysis that focuses on the potential risks and hazards posed by each SWMU is warranted. Further evaluation will be necessary. A more detailed risk assessment and possible remediation may also be necessary. Addressing the SWMUs as separate exposure units will facilitate more informed and resource-effective risk management decisions related to corrective action and remedy selection.*

Western Response:
Western needs more explanation of NMED's statement that "Further evaluation will be necessary." Remediation is expected for both SWMUs and so Western questions what further risk evaluation could be necessary to arrive at that conclusion.

NMED Comment 9
The Permittee states, "Western notes that in preparation of a similar site investigation report at its Bloomfield Terminal (former Bloomfield Refinery), it was directed to use the most conservative of the two NMED non-residential (i.e., industrial worker and construction worker) SSLs." This is true; the Permittee must use the most conservative cleanup level. For the initial screening the Permittee must start by comparing all three (residential, construction, industrial) screening levels and then use the more conservative of the construction worker and industrial screening levels (if the analytical results are below the residential screening level, the most conservative of all of the levels) then the site does not require further risk evaluation). The Permittee used the proper method for the Bloomfield Terminal site and should continue to use that approach.

Western Response:
No response required.

NMED Comment 12
NMED concurs that all of the standards should be included in Table 6 (Groundwater Screening Level Table).

Western Response:
No response necessary.

NMED Comment 13
As discussed in Response to Comments, Comment 9 above, the Permittee must continue to use the most conservative of the non-residential SSLs for comparison whether it is industrial or construction worker.

Western Response:
No response necessary.

II. <u>June 2014 Revised Investigation Report Comments</u>

NMED Comment 1
The Permittee did not include an electronic copy on a disc with the revised submittal, although a disc was provided when requested by NMED. The Permittee is required to submit two paper copies and one electronic copy of submittals according to Permit Section 11.C.7 (Submissions to the Environment Department). The items on the disc should include the document and any related tables, figures, laboratory reports and any other relevant documents. All revised submittals must be accompanied by an electronic version in red-line strikeout showing where all changes have been made. Providing the electronic copy of the document, figures, tables, appendices, and red-line strikeout will facilitate timely review of the document.

Western Response:
Two hard copies of the replacement pages and an electronic copy of the full report are enclosed, including a red-line strikeout version of the revised report text.

NMED Comment 2
If possible, provide a plate-sized (e.g., 24x36-inch) figure depicting the locations of all of the borings advanced during both the Aeration Basin and the OAPIS investigations.

Response:
A larger "plate-sized" copy of Figure 7A is enclosed.

NMED Comment3
In Table 2 (Groundwater Level Measurements) the "Groundwater Elevation (ft)" column lists different groundwater elevations than those reported in the latest Facility-Wide Groundwater Monitoring Report. Please revise the table to present the correct information.

WesternResponse:
Since the SWMU 1 and 14 investigation report was first submitted in February 2013, additional water level measurements have been collected and this is reflected in the latest Facility-Wide Monitoring Report that NMED referenced. This includes quarterly (March, June, September, and November) water level measurements made in 2013. This data and data collected in 2014 has been added to Table 2.

NMED Comment 4
The data tables include values with too many significant digits and do not define the units in several instances. The Permittee must revise the tables to include accurate values with the proper number of significant digits and report the proper units which reflect the number of significant digits as reported in the data. Additionally, some of the detection limits are higher than the screening level. For example, arsenic is listed, for some samples, as having a detection limit of <12.5 mg/kg. The laboratory must use methods that allow for detection limits equivalent to or less than the screening levels, otherwise the data is not useable (see Permit Section IV.J.3). The Permittee must explain the highly variable laboratory detection limits reported in the data tables and discuss the reasons why the detection limits vary by such a wide range. See also Response to Comments, Comment 7.

Western Response:
NMED comments that the data tables have values with too many significant digits and then refers to the "proper number of significant digits." The data tables provided in the July 2014 Investigation Report contain the same values as those included in the original February 2013 copy of the Investigation Report for which NMED did not indicate any problem regarding the number of significant digits. Western does not understand why the presentation of a more accurate result containing more significant digits would elicit a comment from NMED.

Regardless, Western searched the Permit and NMED guidance to identify what NMED is referencing as the "proper number of significant digits" and did not find any reference to significant digits in either of these guiding documents. Western reviewed the electronic copy of the New Mexico Soil Screening Levels (Table A-1) that are provided on your website and observed the values are provided to 15 significant digits while the screening values included in the 2014 *Risk Assessment Guidance for Site Investigations and Remediation* show three significant digits expressed in scientific notation. Western has reported the exact values provided by the laboratory via electronic data delivery in Excel format and deferred to the reporting laboratory to determine the "proper number of significant digits" for detected results.

As these tables will have to be revised again after the additional field work is completed, Western has not made any changes regarding significant digits at this time, but will work with NMED to revise subsequent versions in a manner acceptable to NMED. Possibly NMED would prefer all data values reported in scientific notation for ease in comparison to your screening levels, which are presented in scientific notation.

Tables 9 and 10 were revised to add the missing units. The variable "detection limits" to which NMED refers are affected by required sample dilutions and matrix interference. While the laboratory may have a much lower actual detection limit, the final reporting detection limit or practical quantitation limit is sample specific.

Western requested the laboratory to review arsenic results and determine if lower estimated values could be provided. These estimated (j-flagged) results have been added to Tables 7 and 8 and the amended laboratory report pages for metals are provided for inclusion in Appendix E.

NMED Comment 5

Hand auger borings around the Aeration Lagoons generally encountered a silty clay/gravel layer from 0-0.5 ft bgs and often hit refusal at 0.5 ft bgs, because of the presence of gravel. The gravel fill in these borings is most likely gravel placed over spill areas and therefore, would likely be clean. The borings did not encounter berm material other than the gravel/clay mixture at the top of the berms. The purpose of sampling around the berms was to determine whether or not the berm material contained potentially permeable layers that may have allowed seepage to occur. The data from these borings must not be used to determine whether the soil in the berm is contaminated or not and cannot be used for risk calculations, because it could skew the data. If the Permittee believes that the berm soil samples from 0' -0.5' feet are representative of site conditions, then the Permittee must provide the rationale to support this assertion.

Western Response:

NMED makes unfounded assertions that the presence of gravel along the top of the berms is "most likely gravel placed over spill areas." There is no information in the record or known to Western to provide any credence to this assumption. In fact, a relatively small amount of gravel was placed along the top of the berms in select locations to facilitate access to the Aeration Basin, as the native clay soils, of which the berms are composed, can be difficult to work on under rainy conditions. There is no correlation to the observed presence or absence of gravel near the top of the berms and contamination. A review of the soil data comparing the surface (0-6") results to the deeper (e.g., 1.0-1.5' and 1.5-2') soil results does not show a significantly lower concentration at the surface or any evidence that the surface (0-6") samples are not representative of actual concentrations present at the site in the upper 6 inches at the top of the berms.

The purpose of the shallow hand auger borings, which were targeted to only extend to a maximum depth of two feet, was not to "determine whether or not the berm material contained potentially permeable layers that may have allowed seepage to occur" as indicated by NMED. The soils in the upper two feet (the maximum target depth for the hand auger borings) are above the historic operational water level in the Aeration Basin and would not have been impacted by seepage. The purpose of these shallow hand auger borings was to determine if there had been any releases that may have affected surface/shallow soils surrounding the Aeration Basin and to help determine the lateral extent of remediation required. As explained in Section 4.1 of the Investigation Work Plan, "In addition, seven deep soil borings will be installed around the perimeter as shown in Figure 4-1 to determine if constituents have migrated laterally from the surface impoundments impacting either soils or groundwater and to help determine the source of water found in GWM-2 and GWM-3." In fact, in addition to the 22 shallow hand auger borings completed around the perimeter of the Aeration Basin, 17 deeper soil borings were completed using hollow-stem augers. It is these 17 deeper soil borings that provide information to "determine whether or not the berm material contained potentially permeable layers that may have allowed seepage to occur."

NMED Comment 6
In Section 5 (Regulatory Criteria), page 49, the Permittee states, "[i]t should also be noted that the soil sample results for chromium are compared to the screening levels for both chromium III and VI, as speciation has not been conducted to determine if the detected chromium is chromium III or chromium VI." Chromium VI is the more conservative of the soil screening levels and some of the reported concentrations of chromium are greater than the chromium VI soil screening level. The Permittee must discuss whether or not chromium VI was ever used at the refinery. Based on this information, the Permittee may need to speciate for chromium to determine whether or not chromium VI is present at the facility.

Western Response:
Historical documentation does indicate that Chromium VI was used at the refinery. Soil samples were recently collected from nearby SWMU 10 – Sludge Pits and tested for both total chromium and chromium VI. The former sludge pits were used to dispose of API separator sludge and should be somewhat representative of waste materials and impacted soils potentially present at SWMUs 1 and 14. None of the soil samples collected at SMWU 10 have been confirmed to indicate the presence of chromium VI.

Western submitted a Work Plan for additional investigation at SWMUs 1 and 14 in August 2014 and possibly this Work Plan could be supplemented to include analyses of any new soil and groundwater samples for chromium VI.

Comment 7
In Section 7.1.2 (Old API Separator), under the heading "Groundwater", page 67, the Permittee states, "[t]he lateral extent of potential impacts to groundwater was defined by a series of dry soil borings drilled to the west, south and east of the OAPIS. SWMU 14-1, the western most soil boring near the OAPIS was drilled to a depth of 50 feet and never did encounter bedrock. There was no indication of saturation in SWMU 14-1 and the boring failed to produce any water. Two borings (SWMU 14-21 and SWMU 14-22) were drilled south of the OAPIS and no elevated PID readings or indication of saturation was logged in either boring. Soil boring SWMU 14-23 was drilled east of the OAPIS and did encounter a sandy clay zone at 16 feet bgs that was wet, but a temporary well completion in the boring failed to produce any water." Soil borings SWMU 14-21 and SWMU 14-22 were drilled to 10 feet whereas groundwater was encountered in soil borings SWMU 14-2/0APIS-1 and SWMU 14-3 at 18 and 14 feet bgs, respectively. Borings SWMU 14-21and14-22 would likely not encounter groundwater, because they were not drilled deep enough. Soil boring SWMU 14-3 encountered a stratigraphic layer with "gravel at top" and odor" at 14 feet, which is also where groundwater was encountered. The soil boring log for soil boring SWMU 14-23 indicates the presence of groundwater at 16 feet bgs and no recovery after 16 feet, so it seems that the boring failed to produce water in the temporary well, because there may have been sloughing, even though groundwater was present. Boring SWMU 14-1 encountered a layer with "trace gravel - pebbles" from 12 to 18 feet bgs, which corresponds to the gravelly layer in boring SWMU 14-3, although groundwater was not encountered. Generally, it is known that the alluvium above the Chinle formation contains irregular sand stringers and groundwater flow is highly variable, because of the complex and irregular stratigraphy. NMED understands that it will be difficult to pinpoint the lateral extent of groundwater at this location. However, it does not appear that the Permittee fully defined the lateral extent of potential groundwater impacts and additional investigation may be required. The Permittee has submitted an additional work plan proposing to conduct additional investigations at the SWMUs to define the extent of contamination, once NMED reviews the revised Report, NMED will review the work plan submittal.

Western Response:
Western will review NMED's comments on the SWMU 1 and 14 Investigation Work Plan (submittal date July 28, 2014) when received.

NMED Comment 8
In Section 7.1.1 (Aeration Basin), under the "Groundwater" heading, page 65, the Permittee states, "soil boring SWMU 1-8 was completed on the east side of the Aeration Basin near the New API Separator. Bedrock was encountered at a depth of 19 feet bgs and there was one relatively thick saturated interval of clayey sand found on top of the bedrock from a depth of approximately 13 feet to 19 feet bgs. 1-Methlynaphthalene, MTBE and naphthalene were found in the groundwater sample collected from this boring at concentrations above their screening levels; however, there are additional monitoring wells in this area (e.g., NAPIS-1 located east of the new API Separator) that can be used to provide delineation to the east." The monitoring wells located to the east are contaminated as well; therefore, they do not provide delineation and cannot be used to show that there is no contamination east of soil boring SWMU 1-8. It may not be possible to delineate the vertical extent of groundwater contamination at the Aeration Basin, because of comingling of contamination from other units. The Permittee may have to address groundwater contamination separately from the soil at these SWMUs and approach groundwater monitoring and cleanup in a holistic manner for the entire Facility.

Western Response:
NMED is referred to the latest *Annual Ground Water Monitoring Report* to which you reference in Comment 3 above. As noted in the *Annual Ground Water Monitoring Report*, quarterly groundwater samples from well NAPIS-1 did not indicate the presence of metals (total or dissolved), VOCs, or SVOCs above screening levels. Well NAPIS-1, which is located to the east and up-gradient to the New API Separator does define the eastern extent of groundwater impacts in this area.

NMED Comment 9
In Section 7.2 (Recommendations) the Permittee states, "[t]he area between the OAPIS and the Aeration Basin is relatively small and does not warrant additional investigation to determine if there is possible separation of impacts sourced from the two different SWMUs." Further characterization may not be needed at this time; however, this area is the location where the highest concentrations of contaminants in soil and groundwater were observed. The Permittee must address this issue when these units are more accessible.

Western Response:
Western anticipates implementing a single remedy that will address both SWMUs, including the small area between the SWMUs such that no unprotective conditions will remain after remedy completion.

NMED Comment 10
In Table 10 (Old API Separator Groundwater Analytical Results Summary) the groundwater sample collected from boring SWMU 14-3 has a reported DRO concentration of 83 (no units provided, NMED assumes mg/L), which indicates the presence of light non-aqueous-phase liquids (LNAPL). The Permittee must determine whether or not there is LNAPL on the groundwater. Additional investigation may be required.

Western Response:
NMED assumes correctly, all values in the table are presented as mg/L and Table 10 is revised. A review of the boring log for boring SWMU 14-3 does not indicate the presence of NAPL in the

soils and there was no LNAPL observed when collecting a groundwater sample from this boring. Well OAPIS-1 is located only about 20 feet from boring SWMU 14-3 and quarterly groundwater samples have been collected from this well since it was installed. At no time has there been any indication of LNAPL in well OAPIS-1.

What is known is that wastewater handled in the Old API Separator would have been in direct contact with LNAPL allowing for high dissolved-phase concentrations to be present. If this wastewater infiltrated through the soils in the immediate vicinity of the Old API Separator, then it would be likely to have the concentrations of constituents observed in shallow groundwater. And, this would be possible without the presence of LNAPL in the subsurface, or at least not in sufficient volumes to be mobile.

NMED Comment 11
Review and revise Table 13 (SWMU No. 14 Cumulative Risk and Hazard Index Evaluation) and Table 14 (SWMU No. 1 Groundwater Cumulative Risk Evaluation) to address typographical errors in the maximum concentrations listed in both tables for contaminants that exceed screening levels. Additionally, many of the concentrations reported in Table 14 for contaminants detected in groundwater (but not exceeding screening levels) are not listed in Table 9 (Aeration Basin Groundwater Analytical Results Summary) and Table 10 (Old API Separator Groundwater Analytical Results Summary). The Permittee must ensure that data is entered correctly and that tables correspond to the text as necessary. In the response to comments discuss whether or not the typographical errors impacted the calculations.

Western Response:
Constituent 2-methylnaphthalene was included in Tables 12 and 13 twice, once under the volatile analyses and again under the semi-volatile analyses for carcinogens. The duplicate results were removed, with the highest reported concentrations of 55 mg/kg retained in Table 12 and 90 mg/kg retained in Table 13. In Table 14, 1-methylnaphthalene was included twice under the carcinogens and the duplicate result was removed with the highest reported concentration of 0.011 mg/kg retained. These changes do slightly impact the calculations.

Based on NMED's comment above to include sample data from sample SMWU 1-1 (2-4') in both SWMU cumulative evaluations, there were more changes to the calculations for Table 13 (SWMU 14). The concentration for chromium actually remains unchanged as it was already reported at 400 mg/kg, which apparently was not corrected from when NMED previously directed Western to split the tables. Lead increases from 14 to 80 mg/kg, mercury increases from 1.3 to 1.4 mg/kg, zinc increases from 230 to 720 mg/kg, fluorine increases from 3.0 to 3.7 mg/kg, and phenanthrene increases from 9.8 to 11 mg/kg. As most of these constituent's maximum reported concentration is significantly less than their respective screening levels, the overall cumulative risk values discussed in Section 7.1 do not change significantly.

Western reviewed Table 14 and all of the maximum reported results are included; however, what is missing is the non-carcinogenic constituents. Table 14 is revised to include the non-carcinogenic constituents. The same situation occurred for Table 15 and it is similarly revised. Also, the initial risk calculations used the screening levels as specified under Section IV.D of the Permit; however, upon further review it is noted that some of these "screening levels" are not risk-based (e.g., the MCLs and WQCC standards). Either the New Mexico Tap Water screening level or EPA Tap Water screening levels have been substituted for these nonrisk-based values in the revised tables.

NMED Comment

The Permittee indicated during a meeting on October 6, 2014 that they would like to discuss plans for the disposition of the Aeration Basin and contiguous sites. NMED believes this discussion may aid in the revision of the additional soil investigation work plan and responses to these comments.

Western Response:
Western does believe that many of the issues commented on above by NMED can be resolved in project meetings and welcomes the opportunity to discuss the site assessment activities and corrective action for the Aeration Basin and adjacent SWMUs/AOCs.

Due to the few actual changes relative to the size of the full report, Western is providing hard copy replacement pages. To simplify the replacement process, the entire text portion of the report, including table of contents is replaced along with Appendix B. New Figures 2, 3 and 7A are enclosed, along with revised Tables 2, 7, 8, 9, 10, 12, 13, 14, and 15. An electronic copy of the redline document is enclosed indicating changes to the text of the report, including Appendix B. An electronic copy of the full revised report is also provided on the enclosed disk.

The preceding letter and accompanying enclosures are responsive to the above instructions. Western hereby requests approval of the subject Investigation Report as amended by this submission. If there are any questions regarding the enclosed revised Investigation Report, please contact Mr. Ed Riege at (505) 722-0217. Please note that, in submitting the preceding response and enclosures, Western makes no admissions and reserves all applicable rights and defenses.

Certification

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

Sincerely,

William Paul McClain

Mr. Billy McClain
Refinery Manager
Western Refining Southwest, Inc. – Gallup Refinery

cc D. Cobrain NMED HWB without enclosure
N. Dhawan, NMED HWB without enclosure
K. Van Horn, NMED HWB without enclosure
C. Chavez, OCD
L. King, EPA without enclosure

A. Allen, Western El Paso

INVESTIGATION REPORT

Solid Waste Management Unit (SWMU) No. 1 Aeration Basin and SWMU No. 14 Old API Separator

Gallup Refinery
Western Refining Southwest, Inc.
Gallup, New Mexico

EPA ID# NMD000333211

Volume 1 of 2
(Report, Tables and Figures)

February 2013
(Revised June 2014 and August 2015)

Billy McClain
Refinery Manager
Western Refining Southwest, Inc.
Gallup Refinery

INVESTIGATION REPORT

Solid Waste Management Unit (SWMU) No. 1 Aeration Basin and SWMU No. 14 Old API Separator

Gallup Refinery
Western Refining Southwest, Inc.
Gallup, New Mexico

EPA ID# NMD000333211

Volume 2 of 2
(Appendices A - F)

February 2013
(Revised June 2014)

Table of Contents

List of Sections

List of Acronyms A-1

Executive Summary E-1

Section 1 Introduction 1

Section 2 Background 3
- 2.1 SWMU No. 1 Aeration Basin 3
- 2.2 SWMU No. 14 Old API Separator 8

Section 3 Scope of Activities 12
- 3.1 Soil Boring, Monitoring Well Installation and Sample Collection 12
- 3.2 Background Information Research 14
- 3.3 Collection and Management of Investigation Derived Waste 14
- 3.4 Surveys 14

Section 4 Field Investigation Results 16
- 4.1 Surface Conditions 16
- 4.2 Subsurface Conditions 17
- 4.3 Exploratory Drilling Investigations, Soil Sampling and Boring Abandonment 21
- 4.4 Monitoring Well Construction and Groundwater Sampling 44

Section 5 Regulatory Criteria 48

Section 6 Site Impacts 51
- 6.1 Soil Analytical Results 51
- 6.2 Groundwater Analytical Results 55
- 6.3 General Groundwater Chemistry 60

Section 7 Conclusions and Recommendations 62
- 7.1 Conclusions 62
- 7.2 Recommendations 68

Section 8 References 69

List of Tables

Table 1 Historical Groundwater Analyses
Table 2 Groundwater Level Measurements
Table 3 Soil Boring – Vapor Screening Results
Table 4 Residential Soil Screening Levels
Table 5 Non-Residential Soil Screening Levels
Table 6 Groundwater Screening Levels
Table 7 Aeration Basin Soil Analytical Results Summary
Table 8 Old API Separator Soil Analytical Results Summary
Table 9 Aeration Basin Groundwater Analytical Results Summary
Table 10 Old API Separator Groundwater Analytical Results Summary
Table 11 Groundwater Field Measurements
Table 12 SWMU No. 1 Soil Cumulative Risk and Hazard Index Evaluation
Table 13 SWMU No. 14 Soil Cumulative Risk and Hazard Index Evaluation
Table 14 SWMU No. 1 Groundwater Cumulative Risk Evaluation
Table 15 SWMU No. 14 Groundwater Cumulative Risk Evaluation

Table of Contents (Continued)

List of Figures

Figure 1 Site Location Map
Figure 2 SWMU No. 1 Sample Locations
Figure 3 SWMU No. 14 Sample Locations
Figure 4 Topographic Map
Figure 5 Geologic Map of New Mexico
Figure 6 Cross Section A-A' West to East
Figure 6A Cross Section Location Map
Figure 7 Cross Section B-B' North to South
Figure 7A Cross Section Location Map
Figure 8 Cross Section C-C' North to South
Figure 9 Sand Isopach Map
Figure 10 Paleotopographic Map
Figure 11 Potentiometric Surface Map August 2009
Figure 12 1,2,4-Trimethylbenzene Soils Concentration Map – SWMU No. 1
Figure 13 1-Methylnaphthalene Soils Concentration Map – SWMU No. 1
Figure 14 Benzene Soils Concentration Map – SWMU No. 1
Figure 15 Naphthalene Soils Concentration Map – SWMU No. 1
Figure 16 Diesel Range Organics Soils Concentration Map – SWMU No. 1
Figure 17 1,1,2-Trichloroethane Soils Concentration Map – SWMU No. 14
Figure 18 1,2,4-Trimethylbenzene Soils Concentration Map – SWMU No. 14
Figure 19 1,2-Dibromo-3-chloropropane Soils Concentration Map – SWMU No. 14
Figure 20 1,2-Dibromomethane Soils Concentration Map – SWMU No. 14
Figure 21 1,2-Dichloropropane Soil Concentration Map – SWMU No. 14
Figure 22 1-Methylnaphthalene Soils Concentration Map – SWMU No. 14
Figure 23 2-Methylnaphthalene Soils Concentration Map – SWMU No. 14
Figure 24 Benzene Soils Concentration Map – SWMU No. 14
Figure 25 Ethylbenzene Soils Concentration Map – SWMU No. 14
Figure 26 Naphthalene Soils Concentration Map – SWMU No. 14
Figure 27 Xylenes Soils Concentration Map – SWMU No. 14
Figure 28 Bis (2-chloroethyl) ether Soil Concentration Map – SWMU No. 14
Figure 29 Diesel Range Organics Soils Concentration Map – SWMU No. 14
Figure 30 SWMU No. 1 and No. 14 Metals Groundwater Concentration Map
Figure 31 SWMU No. 1 and No. 14 Organics Groundwater Concentration Map

List of Appendices

Appendix A Trihydro Report, June 2008
Appendix B Field Methods
Appendix C Site-Specific Dilution/Attenuation Factor Calculations
Appendix D Boring Logs
Appendix E Analytical Data Reports
Appendix F Quality Assurance/Quality Control Review

List of Acronyms

API	American Petroleum Institute
AOCs	areas of concern
BTEX	benzene, toluene, ethylbenzene, and xylene
bgl	below ground level (bgl)
CFR	Code of Federal Regulations
DRO	diesel range organics
DAF	dilution/attenuation factor
EPA	Environmental Protection Agency
gpm	gallons per minute
HI	hazard index
HSA	hollow-stem auger
IDW	investigation derived waste
LPG	liquefied petroleum gas
LTU	Land Treatment Unit
MADEP	Massachusetts Department of Environmental Protection
MCL	maximum contaminant level
msl	mean sea level
MW	monitoring well
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
RCRA	Resource Conservation and Recovery Act
PID	photoionization detector
PVC	polyvinyl chloride
SPH	separate phase hydrocarbon
SWMUs	Solid Waste Management Units
TPH	total petroleum hydrocarbon
TVOC	total volatile organic content
TCLP	toxicity characteristic leaching procedure
USCS	unified soil classification system
VOC	volatile organic constituent
WQCC	Water Quality Control Commission

Executive Summary

The Gallup Refinery, which is located 17 miles east of Gallup, New Mexico, has been in operation since the 1950s. Past inspections by State and federal environmental inspectors have identified locations where releases to the environment may have occurred. These locations are generally referred to as Solid Waste Management Units (SWMUs) or Areas of Concern (AOCs). Pursuant to the terms and conditions of the refinery's Resource Conservation and Recovery Act (RCRA) Post-Closure Care Permit and 20.4.1.500 New Mexico Administrative Code, this environmental site investigation was completed for SWMU No. 1 (Aeration Basin) and SWMU No. 14 (Old API Separator).

The activities completed include sampling and analysis of soils and groundwater surrounding the Aeration Basin and Old API Separator to determine if there has been a release to the environment and to delineate any such release. In addition, information was collected to help determine the source of groundwater that has been observed in monitoring wells GWM-2 and GWM-3. The investigation began on July 16, 2012 and continued through October 16, 2012. This included the completion of 63 soil borings with 171 soil samples (excluding additional quality assurance samples) collected for analysis of potential site-related constituents (e.g., volatile and semi-volatile organics, total petroleum hydrocarbons, and metals). One of the soil borings (SWMU 14-2) near the Old API Separator was completed as a permanent monitoring well (OAPIS-1) and temporary well completions were installed in 10 additional borings to allow collection of groundwater samples. Twelve groundwater samples (excluding additional quality assurance samples) were collected for analysis of potential site-related constituents (e.g., volatile and semi-volatile organics, total petroleum hydrocarbons, metals, and inorganic/general water quality parameters).

At the Aeration Basin, four organic constituents (1,2,4-trimethylbenzene, 1-methylnaphthalene, benzene, and naphthalene) and diesel range organics (DRO) were detected in three soil samples at concentrations exceeding their respective screening levels developed to ensure protection of potable groundwater. The three impacted soil samples were located at the north and south ends of the Aeration Basin.

There were numerous metals detected at concentrations above residential / tap water screening levels in groundwater samples collected from the soil borings that surround the Aeration Basin. The metal residential / tap water screening levels were exceeded in every soil boring from which

a groundwater sample was collected. It is possible that these results are affected by high turbidity levels in the water samples collected from the temporary well completions installed in the soil borings. Seven organic constituents (1-methylnaphthalene, 2-methylnaphthalene, 1,2,4-trimethlybenzene, benzene, methyl tert-butyl ether (MTBE), naphthalene, and 2,4-dimethylphenol), and DRO were detected in groundwater samples collected from soil borings at concentrations above residential / tap water screening levels. At least one organic constituent was found at concentrations above the residential / tap water screening levels in groundwater at five borings immediately surrounding the Aeration Basin and one boring a short distance to the southwest. Some of the deep soil borings completed near the Aeration Basin were either dry or would not produce enough water to allow completion of all scheduled analyses.

At the Old API Separator (OAPIS), twelve organic constituents [1,1,2-Trichloroethane, 1,2,4-trimethylbenzene, 1,2-dibromo-3-chloropropane, 1,2-dibromoethane (EDB), 1,2-dichloropropane, 1-methylnaphthalene, 2-methylnaphthalene, benzene, ethylbenzene, naphthalene, xylenes, and bis(2-chloroethyl)ether] and DRO were detected in soils at concentrations above their screening levels developed to ensure protection of potable groundwater. 1,2-Dibromo-3-chloropropane was detected in one soil sample and 1,2-dibromoethane (EDB) was detected in four soil samples at concentrations above their residential direct contact soil screening levels. The highest concentrations were found in soil samples collected directly beneath the former location of the OAPIS and at borings immediately adjacent to the OAPIS. In addition, there is an area of elevated concentrations at depths of 8 to 12 feet below ground level (bgl) located near the west end of the former OAPIS extending north towards the location of the former benzene strippers.

Groundwater samples were collected from two soil borings near the OAPIS, one of which was completed as a permanent monitoring well. Similarly as observed above for the temporary well completions around the Aeration Basin, many metals were detected above residential / tap water screening levels in the groundwater samples collected at these locations. The number of metals detected at concentrations above their residential / tap water screening levels in the groundwater sample collected from the permanent well completion (OAPIS-1) was significantly less than the number detected in the groundwater sample collected from the initial temporary well completion in this same soil boring. It is possible that these results are affected by high turbidity levels in the water samples collected from the temporary well completions. Seven organic constituents (benzene, 1-methlynaphthalene, 2-methylnaphthalene, 1,2,4-

trimethlybenzene, methylene chloride, MTBE, and naphthalene) and DRO were detected at concentrations above their residential / tap water screening levels in groundwater samples.

Potential future actions include an additional soil boring to the north of the Aeration Basin to provide full delineation of both soil and groundwater impacts to the north of the Aeration Basin. Also an additional boring to the southwest of the Aeration Basin could provide additional control in this area for potential groundwater impacts. The area between the OAPIS and the Aeration Basin is relatively small and does not warrant additional investigation to determine if there is possible separation of impacts sourced from the two different SWMUs. An additional soil boring could be installed east of the OAPIS to provide full delineation of soil impacts observed in this area. Additional soil data to the southwest of the OAPIS could be used to better define soil impacts observed in this area of the site.

Section 1
Introduction

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

The Gallup Refinery is a crude oil refinery currently owned and operated by Western Refining Southwest, Inc., formerly known as Giant Industries Arizona, Inc. and formerly doing business as Giant Refining Company Ciniza Refinery, an Arizona corporation. The Gallup Refinery generally processes crude oil from the Four Corners area transported to the facility by pipeline or tanker truck.

Various process units are operated at the facility, including crude distillation, reforming, fluidized catalytic cracking, alkylation, isomerization, sulfur recovery, merox treater, and hydrotreating. Current and past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

The area of investigation that is the subject of this report is shown on Figure 2 for the Aeration Basin (SWMU No. 1) and Figure 3 for the Old API Separator (SWMU No. 14). The purpose of the site investigation is to determine and evaluate the presence, nature, and extent of releases of contaminants in accordance with 20.4.1.500 New Mexico Administrative Code (NMAC) incorporating 40 Code of Federal Regulations (CFR) Section 264.101. The investigation was completed pursuant to the SWMU No. 1 Investigation Work Plan dated February 2012 (revised June 2012) and the SWMU No. 14 Investigation Work Plan dated January 2010 (revised October 2010), with a few deviations (e.g., installation of additional soil borings), which are discussed in Section 3.1.

Section 2 presents background information for SWMU No. 1 and No. 14, including a review of historical waste management activities to help identity the types of waste handled, sources of releases, and previously known impacts to the environment. Section 3 describes the scope of work completed during the site investigation, including completion of soil borings, installation of a monitoring well, and sample collection. The fourth section of the report explains the results of the field investigation, including the general surface and subsurface conditions and detailed site-

specific information acquired during subsurface investigations. Section 5 explains the regulatory standards that are used for comparison to the analytical results and Section 6 presents the analytical results of soil and groundwater samples analyzed for volatile and semi-volatile organic constituents, total petroleum hydrocarbons (TPH), metals, and inorganic general chemistry constituents. The results of these analyses are compared to applicable State or federal cleanup and screening levels. Section 7 summarizes and provides an evaluation of the potential impacts and provides recommendations for any future actions.

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Section 2
Background

This section presents background information for SWMU No. 1 and No. 14, including a review of historical waste management activities for each SWMU to identity the following:

- Type and characteristics of waste and contaminants handled;
- Known and possible sources of impacts;
- History of releases; and
- Known extent of impacts prior to the current investigation.

2.1 SWMU No. 1 Aeration Basin

The Aeration Basin, which is designated as SWMU No. 1 in the facility's RCRA Post-Closure Care Permit, was constructed within original Pond No. 1 in 1987. The location and extent of the Aeration Basin is documented in the Post-Closure Care Permit, Attachments – Post-Closure Permit Application Volume III. The Aeration Basin includes three cells, which were created within original Pond No.1 to facilitate the addition of aeration units to the facility's wastewater treatment. These three cells are identified in the RCRA Permit as Inlet Aeration Basin, Second Aeration Basin and Holding Pond. Subsequently, the first two cells (Inlet Aeration Basin and Second Aeration Basin) have become known as the aeration lagoons or more specifically, AL-1 and AL-2. The third cell (Holding Pond) is now commonly referred to as EP-1, although it is not an evaporation pond and is not part of the area covered by SWMU No. 2 - Evaporation Ponds. Hereafter, the currently used designations of AL-1, AL-2 and EP-1 are used to refer to the three cells of SWMU No. 1 – Aeration Basin (Figure 2).

The aeration lagoons (AL-1 and AL-2) cover an area approximately 275 feet by 150 feet and have an estimated holding capacity of 1 million gallons. EP-1 is approximately 225 feet by 250 feet and has an estimated holding capacity of 3 million gallons. Three benzene air strippers were located between the refinery's API separator and the aeration lagoons to prevent characteristically hazardous waste from being discharged to the aeration lagoons. Monitoring data of the effluent from the two original benzene air strippers, which discharges into the inlet aeration lagoon, and flows into AL-2 has indicated that concentrations of benzene above the toxicity characteristic (TC) regulatory threshold of 0.5 milligrams per liter (mg/l) have entered these impoundments.

2.1.1 Operational History

Prior to construction of the new wastewater treatment plant, the refinery process wastewater generated (approximately 178 gallons per minute (gpm) average flows for calendar year 2011) at the Gallup Refinery was managed first by physical treatment in an API separator, and then the volatile components were removed via benzene air strippers. The final treatment (biological) occurred in two aeration lagoons operated in series (AL-1 and AL-2). Water then flowed to EP-1, before being discharged to the evaporation ponds. The lagoons and EP-1 are earthen surface impoundments with natural clay functioning as a bottom liner. AL-1 and AL-2 are equipped with surface aerators to oxygenate the water and stimulate biological activity.

Wastewater from AL-1, subject to aggressive biological treatment, is routed to AL-2 through an overflow pipe. Flows to the aeration lagoons measured as totalized flow from the API Separator averaged 178 gallons per minute (gpm) for calendar year 2011. Totalizer readings were recorded weekly. Daily average flows were calculated based on elapsed time between readings. Western has installed a real time electronic data system that captures minute by minute flow data.

Western recently completed the construction of a new wastewater treatment plant that replaces the Aeration Basin. In April 2012, wastewater flows from the refinery were redirected to the new wastewater treatment plant. The Aeration Basin continued to receive wastewater from the nearby Pilot Travel Center until June 2013, when all wastewater flows were directed to the new wastewater treatment plant.

2.1.2 Prior Maintenance Activities

Western has experienced intermittent discharges of oil and oily water into the lagoons as documented in previous correspondence to NMED. Most of these occurrences were the result of unit upset/large storm events affecting the old API Separator. Some recent examples are described below:

- A release of oily water from the old API separator and its inlet box occurred on August 3, 2005 with approximately 17 cubic yards of impacted soils excavated from AL-1 and AL-2;
- Approximately 13 cubic yards of impacted soils were excavated from AL-1 and AL-2 after a release of oily water from the old API separator occurred on August 15, 2005;

- On June 15, 2006, Western submitted a letter to NMED requesting a “contained-in” determination regarding soil excavated from AL-1, AL-2 and EP-1 to remediate releases of oily water containing F037/F038, which occurred in the fall of 2005;

- A release of approximately 700-800 gallons of oil from the new API separator (NAPIS) occurred on March 3, 2007 to AL-1, AL-2, and EP-1, which resulted in the collection additional effluent samples at AL-1, AL-2 and EP-1. In July 2007, the impacted bank soils were removed from the aeration lagoons (AL-1 and AL-2), EP-1 and evaporation pond EP-2. NMED stated in their letter of August 15, 2007, that the oily wastewater contained benzene (D018) and F037/F038-listed waste; however, the excavated soils were determined to meet the contained-in criteria and the excavated materials were appropriately disposed off-site pursuant to NMED’s direction;

- On June 23, 2007 and July 19, 2007, oily wastewater reported to contain benzene (D018) and F037/F038-listed waste was released from the weir box at the NAPIS. The impacted soils were removed and subsequent analyses demonstrated the soils met the contained-in criteria for management as non-hazardous waste; and

- On August 3, 2008, 756 gallons of oily wastewater was discharged from the NAPIS to the Aeration Basin. The impacted soils were removed and disposed off-site pursuant to NMED’s approval.

2.1.3 Historical Site Investigations

Soil sampling was conducted near the aeration lagoons and EP-1 during the RFI in the early 1990s (Giant Refining Company, 1991). Based on the analytical results from the samples, the EPA concurred on January 7, 1994 with Giant’s determination that no significant impact had occurred and thus no further action was required for SWMU #1. EPA requested that on-going soil sampling be conducted at the lagoons every two years, which was later reduced to a frequency of five years. The first “monitoring” event was completed in October, 1996 (Giant Refining Company, 1996). Soil samples were collected from depths of four feet to 20 feet below ground surface with some borings angled to allow collection of samples beneath the lagoons. Neither volatile nor semi-volatile organics were detected in 25 of the samples. Two samples collected near the side wall of the inlet aeration lagoon at a depth of four feet had very low concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX). The highest concentration was 2.2 mg/kg of xylenes.

A visual assessment of the lagoons was conducted in 1998, which concluded that the lagoons were in active service, functioning normally, oxygenating wastewater, and stimulating biological activity (Practical Environmental Services, Inc., 1998). The lagoons were found to have been placed in an appropriate geologic setting in which the underlying bentonitic soils exhibited a very

low hydraulic conductivity of 10^{-7} cm/sec, effectively serving as an aquitard. The noted concentrations of BTEX near the inlet were considered common and predictable for the service.

Two groundwater monitoring wells (GWM-1 and GWM-2) were installed immediately down-gradient of the aeration lagoons in 2004 and 2005, respectively. Analyses of groundwater samples collected at GWM-1 and GWM-2 have indicated only very low concentrations of constituents such as BTEX and MTBE that would indicate a potential for historical releases from the lagoons. GWM-3 is also located nearby, adjacent to EP-1. Both GWM-2 and GWM-3, which were intentionally installed in the vadose zone as dry wells to detect potential leakage from SWMU No. 1, were dry during the 2007 annual sampling event.

In 2008 GWM-1 was sampled on July 10 and results are submitted to NMED annually (Western Refining Annual Ground Water Monitoring Reports). Detections at concentrations greater than established comparison criteria included benzene (0.011 mg/L), MTBE (0.12 mg/L), arsenic (0.070 mg/L), manganese (3.6 mg/L) and iron (14 mg/L). Iron and manganese detections may be indicative of reducing groundwater conditions that could alter inorganic valence states leading to elevated concentrations of iron and manganese in groundwater.

GWM-2 and GWM-3 were checked quarterly in 2008 to determine if any water was present in the wells. Water was first encountered in GWM-2 on February 18, 2008 and a sample was subsequently collected on February 28, 2008 and analyzed for petroleum hydrocarbons and volatile organic compounds (VOCs). The only constituent detected was MTBE at a concentration of 0.028 milligrams per liter. GWM-2 was checked again on March 17, 2008, May 21, 2008, September 10, 2008, and November 3, 2008, but it was found to be dry each time. GWM-3 was also checked on these same dates and found to be dry. Both wells were checked quarterly during 2009 and found to be dry on each occasion.

Water levels continue to be checked quarterly in GWM-2 and GWM-3 and during the second quarterly inspection in 2010 both wells indicated the presence of water. An estimated water column thickness of 1.5 feet and 0.88 feet was measured at GWM-2 and GWM-3, respectively. Water was present in both wells and samples were collected for analysis on a quarterly basis through November 2012. During the first quarterly sampling event in 2013 (March 18, 2013), GWM-3 was found to be dry and water has not been present in the well during subsequent quarterly monitoring events through March 11, 2014. Water was found in GWM-2 until the first quarterly sampling event in 2014. The results of the historical chemical analyses are

summarized in the Table 1 through March 2012. As indicated in the tables, there have been a number of constituents detected in water samples collected from GWM-1, GWM-2, and GWM-3 that are at concentrations above potentially applicable action levels. Water level measurements are also included in Table 2.

An investigation of the aeration lagoons and EP-1 was conducted in April 2008 to characterize the volume and nature of sediments in each lagoon. A copy of the report of the investigation prepared by Trihydro Corporation is included as Appendix A. Based on this investigation, there appears to be two layers of sludge/sediment in the aeration lagoons. The upper layer ("soft sediment") is described as a soft, loose, and unconsolidated, as opposed to the lower layer ("hard pack sediment") that is more compact and dense. In some areas, the distinction between the two layers is indiscernible.

The investigation of EP-1 did not yield a similar distinction of sediment layers. The sediment in EP-1 exhibits similar physical characteristics to the soft sediment found in AL-1 and AL-2. Sixteen sediment depth measurements were made in EP-1, however only 5 measurements resulted in sediment depths greater than 2 feet. The sediment appearance was described as a black sludge with fluid in the upper portion and an increasing silt content moving deeper through the sample

Trihydro used the software program SurvCAD to produce calculations estimating the volumes of sediment in each lagoon and EP-1. Appendix E of the Trihydro Report provides the input parameters used in the program. The SurvCAD program produced the following estimates for sediment in the two lagoons and EP-1.

Estimated Volumes of Sludge in AL-1 and AL-2

Unit	Soft Sediment Thickness Min/Max (ft)	Soft Sediment Avg Thickness (ft)	Estimated Soft Sediment Volume (cy)	Hardpack Sediment Thickness Min/Max (ft)	Hardpack Sediment Avg Thickness (ft)	Estimated Hardpack Sediment Volume (cy)	Total Estimated Sediment Volume (cy)
AL-1	3.2-5.9	4.4	1,464	0-2.5	0.52	229	1,693
AL-2	5.8-8.5	7.47	3,404	0-2.2	0.96	430	3,834

Estimated Volumes of Sludge in EP-1

Unit	Average Sediment Depth (ft)	Maximum Sediment Depth (ft)	Estimated Sediment Volume (cy)
EP-1	1.59	5.04	3,178

Trihydro notes that the observed distinction between the two types of sediment in the aeration lagoons was not as evident as expected and therefore, it is suggested that sediment in the lagoons be considered and treated as a single sediment layer. Additionally, since the measurements and calculations are in-situ calculations, the SurvCAD program applied no allowances for expansion or compaction to the calculated estimates. Removal of the material from the lagoons or exposure to ambient air reducing the percent moisture of the sediment may impact the volume of material. Sample log sheets for each location can be found in the Trihydro Report (Trihydro Corporation, 2008).

2.2 SWMU No. 14 Old API Separator

The Old API Separator was not originally included as a SWMU in the 1988 Hazardous and Solid Waste Act (HSWA) permit or the subsequent 1990 RFI Work Plan. The “API Separator” was first added as a SWMU in the August 2000 Post-Closure Care Permit. There were two API Separators at the refinery as shown in Figure 2.

2.2.1 Operational History

The original separator, now referred to as the Old API Separator (OAPIS) was put into service in 1957. The OAPIS initially only received process wastewater and in 1996 a stormwater sewer system was installed that also flowed to the OAPIS. A new API Separator was put into service in October 2004 and the process wastewater was redirected to the New API Separator. The intention was that only the stormwater sewer system would continue to be directed to the OAPIS.

The API Separator is the first step in the treatment process of the refinery’s wastewater. Its purpose is to remove free oil and suspended solids from the wastewater prior to subsequent downstream treatment. An API Separator functions as a gravitational separation unit and is designed based on the difference in specific gravity of the oil to be separated and the wastewater. Three phases result in the separator, with oil at the top, wastewater in the middle and accumulated sediment in the bottom. The oil is constantly removed from the upper layer, wastewater flows through continuously, and the bottom sediment layer is periodically removed to

ensure proper function of the separator. The material accumulating in the bottom of the OAPIS has been routinely removed once a year or more frequently, as necessary.

The OAPIS was approximately 135 feet long, 22 feet wide and six feet high. The unit was mostly below ground level with the southern side being mostly at grade. The land surface slopes away to the north and up to approximately two feet of the separator was above grade in some locations. The unit was constructed on compact clay soils.

2.2.2 Prior Maintenance Activities

After the wastewater flows were diverted to the New API Separator, all residual materials were removed from the OAPIS in October 2004. The material was removed using vacuum trucks and sent off-site for recycling at the NORCO refinery. The OAPIS was steam cleaned and sand blasted in preparation for inspection and repairs. The concrete was patched in numerous locations in both bays and the weir wall down-stream of the pipe skimmer was rebuilt on both bays. Stained soil (approx. 4,500 lbs) identified around the perimeter of the separator was removed and sent off-site for disposal as hazardous waste (K051).

In 2006, Western identified potential “dry weather” flows into the OAPIS and undertook an investigation of the sewer systems to determine if process wastewater was continuing to flow to the OAPIS. Flows from the OAPIS were directed to the New API Separator to ensure any potential process wastewaters entering the OAPIS were appropriately managed. A dye tracer study did not identify any cross-connections between the process wastewater and stormwater sewers. To help reduce the potential for process wastewater to flow to the OAPIS, numerous changes were made to both the stormwater drains and the process sewer drains in the summer of 2006.

The OAPIS was in service until recently to handle stormwater flows but in spite of extensive efforts to eliminate dry weather flows, it appears that some dry weather flow continued to enter the unit until it was taken out of service in February 2011. The discharge from the OAPIS was directed to the New API Separator to ensure appropriate treatment of any dry weather flow that may have entered the OAPIS. A new wastewater treatment plant was recently constructed at the Gallup Refinery and the OAPIS is no longer required, thus its removal from service.

The OAPIS was cleaned out in December 2011 to remove any potentially listed hazardous waste and all non-hazardous waste materials. Demolition of the OAPIS, which was conducted from

June 11, 2012 through June 20, 2012, included removal of the metal components and the concrete containment with the exception of a portion of the southern wall, which was required to remain in-place to maintain the physical integrity of the structures (e.g., the flare knockout tank) located immediately south of the OAPIS.

The nearby benzene strippers were removed from service on November 9, 2012. After they were disconnected from the wastewater treatment plant piping, Strippers #1, #2, and #3 were decontaminated by first removing the packing and then rinsing with water in-place. After decontamination was completed, the strippers were taken to the Bone Yard where they were cut up for disposal. The packing material was placed into supersacks and taken to the 90-day storage area for off-site disposal as a hazardous waste.

2.2.3 Historical Site Investigations

The material handled in the OAPIS has primarily been petroleum hydrocarbons, with a lesser potential for refinery catalyst and gasoline additives to enter the sewer systems. As the solids that accumulate in the bottom of the separator are routinely removed, the greatest potential for a release from the unit would be the liquid phase containing dissolved petroleum hydrocarbons. Liquids could leak from the unit along cracks in the below ground concrete structure or from piping that transfers liquids into and from the unit.

There have not been any documented historical releases from the OAPIS with the aforementioned noted exception of the identification of some surface soils with hydrocarbon stains around the sides of the unit. These stained soils were removed and this limited volume of material did not indicate an obvious significant release.

There had not been an investigation of soils or groundwater in the immediate vicinity of the OAPIS prior to this investigation. There are existing monitoring wells in the general area, with two wells (GMW-1 and GWM-2) located along the down-gradient side of the Aeration Basin and also possibly down-gradient of the OAPIS and four monitoring wells near the New API Separator (NAPIS 1, NAPIS 2, NAPIS 3, and KA-3), which are cross-gradient to the OAPIS (Figure 2). Analyses of groundwater samples collected from these wells are discussed above in Section 2.1.3.

The soil and groundwater samples obtained for this investigation were collected from July 16, 2012 through October 17, 2012. On January 15, 2013, a spill of 70 barrels oily wastewater

occurred onto the ground in the area where OAPIS was located. Western began immediate spill response actions and recovered 69.5 barrels of the spilled wastewater. The spill was limited to a small area within the original footprint of the OAPIS. The soil samples, which had previously been collected from this area, documented significant hydrocarbon impacts in this same area and the relatively dilute wastewater should not have resulted in an increase in concentrations such that the previously collected information would not be a valid representation of current conditions.

Section 3
Scope of Activities

3.1 Soil Boring, Monitoring Well Installation and Sample Collection

Pursuant to the approved Investigation Work Plans, an investigation of soils and groundwater was conducted to determine and evaluate the presence, nature, extent, fate, and transport of contaminants. To accomplish this objective, soil borings and monitoring wells were installed at the Aeration Basin (Figure 2) and the OAPIS (Figure 3).

As outlined in the Investigation Work Plans, there is the potential for constituents to have been released to soils at known locations and therefore a judgmental sampling design was implemented. Examples of these areas include documented spills that affected soils immediately adjacent to the OAPIS.

3.1.1 SWMU No. 1 Aeration Basin

The scope of work for the investigation at the Aeration Basin included approximately 28 shallow (i.e., 2-foot) soil borings spaced 50 feet apart around the perimeter of the Aeration Basin, with each fifth boring extended at least 6 inches below the bottom of the berm material if the berm material is deeper than 24 inches. In addition, eight deep soil borings were to be installed with groundwater samples collected, as possible, from temporary well completions in each deep boring.

Twenty eight shallow soil borings (SWMU 1-9 through SWMU 1- 23, SWMU 1-25 through SWMU 1-36, and SWMU 1-39) were completed and each fifth boring was extended at least 6 inches below the bottom of the berm material where the berm material was deeper than 24 inches (Figure 2). Eight deep soil borings (SWMU 1-1 through SWMU 1-8) were installed around the perimeter as required in the Investigation Work Plan and three additional deep soil borings (SWMU 1-24, SWMU 1-37, and SWMU 1-38) were completed to the southwest and west to facilitate lateral delineation. Based on observations of probable impacts at boring SWMU 1-4, shallow borings SWMU 1-19, SWMU 1-20 (extended deeper), SWMU 1-21, SWMU 1-22, SWMU 1-23, and SWMU 1-39) were shifted to the west to better facilitate lateral delineation on the west side of the Aeration Basin (Figure2). The installation of each boring is discussed in more detail in Section 4.3.

In addition to moving the specific borings discussed above, other deviations from the Investigation Work Plan include the inability to extend some of the shallow borings with a hand auger to the scheduled depth of two feet. The borings are discussed in detail in Section 4.3. Stiff clay with gravel was encountered in these borings, which prevented advancement with a hand auger. An attempt was made to loosen the compacted clay/gravel in advance of the hand auger using a hammer and decontaminated screwdriver, but it was still not possible to reach the target depth of two feet in all hand auger locations.

All eight of the scheduled deep soil borings (SWMU 1-1 through SWMU 1-8) were drilled to the top of bedrock (i.e., the Petrified Forest Formation) and groundwater samples were collected from temporary well completions in all but one of the borings. Soil boring SWMU 1-1 did not yield water and boring SWMU 1-5 yielded only a small quantity of water, which limited the analyses that could be performed (i.e., metals analyses were not conducted at SWMU 1-5). Low water yields affected other temporary wells also, but metals and all other analyses were completed with the exception that only total analyses were completed for the metals. Groundwater samples were also collected from temporary well completions in two of the additional soil borings (SWMU 1-24 and SWMU 1-37).

3.1.2 SWMU No. 14 Old API Separator

The scope of work for the OAPIS included nine soil borings installed to a minimum depth of ten feet and if groundwater was encountered, then a groundwater sample was to be collected from a temporary well completion. One of the soil borings on the north side of the benzene strippers was to be completed as a permanent monitoring well. In addition, soil samples from depths of 0-0.5’ and 1.5-2.0’ were to be collected from 11 additional locations using a hand auger.

Three of the deep soil borings were not completed as scheduled. One boring that was to be drilled beneath the center of the location of the benzene strippers could not be completed because the benzene strippers were still in operation during the investigation; the strippers have since been removed. Two of the planned deep borings (SWMU 14-5 and SWMU 14-8 located on the north side and northwest corner of the OAPIS) had to be installed with a hand auger instead of the hollow-stem auger (HSA) method due to access limitations with the drilling rig (Figure 3). The location for the permanent well (OAPIS-1) was moved slightly to the south, to a location just off the northwest corner of the benzene strippers. Four additional deep borings (SWMU 14-6, SWMU 14-21, SWMU 14-22, and SWMU 14-23) and one hand auger location

(SWMU14-24) were completed to help delineate the lateral extent to the east, south, and west of the OAPIS.

3.2 Background Information Research

Documents containing the results of previous investigations and subsequent routine groundwater monitoring data from monitoring wells were reviewed to facilitate development of the Investigation Work Plans. The previously collected data provides valuable information on the overall subsurface conditions, including hydrogeology and contaminant distribution within groundwater. The data collected under this investigation supplements the historical groundwater data and provides SWMU-specific information regarding contaminant occurrence and distribution within soils and groundwater.

3.3 Collection and Management of Investigation Derived Waste

Drill cuttings, excess sample material and decontamination fluids, and all other investigation derived waste (IDW) associated with soil borings were contained and characterized using methods based on the boring locations and type of contaminants suspected or encountered. All drill cuttings generated during the investigation at the Aeration Basin and the OAPIS were collected and put into 55-gallon drums. A composite sample of all 10 drums was collected using a decontaminated stainless steel spoon and sent to Hall Environmental Laboratory for waste characterization analysis. The sample was analyzed for Reactivity, Corrosivity, and Ignitability (RCI), RCRA 8 (TCLP) Metals, TCLP Volatiles (Method 1311 / 8260), TCLP Semi-volatiles (Method 1311 / 8270), and Total Petroleum Hydrocarbon (TPH) (Method 8015B). The Hall analytical report (# 1208B78) is indicated in Appendix E.

Based on the analysis, ten non-hazardous/non-regulated drums (2.7 cubic yards) were shipped off-site to Advanced Chemical Treatment Facility for disposal. All purge water and decontamination water was collected in 55-gallon drums and disposed in the refinery wastewater system located upstream of the API Separator.

3.4 Surveys

A hand held GPS receiver was used to record the coordinates of each soil boring. These coordinates were recorded on the field boring logs. The monitoring well location was subsequently surveyed by a registered surveyor.

The horizontal coordinates, the top of the monitoring well casing, and the ground surface at the monitoring well location were determined by a registered New Mexico professional land surveyor in accordance with the State Plane Coordinate System (NMSA 1978 47-1-49-56 (Repl. Pamp. 1993)). The surveys were conducted in accordance with Sections 500.1 through 500.12 of the Regulations and Rules of the Board of Registration for Professional Engineers and Surveyors Minimum Standards for Surveying in New Mexico.

Section 4
Field Investigation Results

This section provides a summary of the surface and subsurface conditions at the refinery, including the area near SWMUs No. 1 and 14. A discussion is included on the installation of soil borings, field screening of soils, and collection of soil samples for analysis. This is followed by a description of the installation of permanent and temporary well completions and the collection of groundwater samples.

4.1 Surface Conditions

A topographic map of the area near the Aeration Basin and OAPIS is included as Figure 4. Local site topographic features include high ground in the southeast gradually decreasing to a lowland fluvial plain in the northwest. Elevations on the refinery property range from 7,040 feet to 6,860 feet. The area of the site near the Aeration Basin and the OAPIS is at an approximate elevation of 6,910 feet above mean sea level (msl).

The soils in the immediate vicinity of the Aeration Basin include two soil types. The McKinley County soil survey indicates that the soil type changes near the midline across the aeration lagoons. Surface soils from the northern section of the aeration lagoons and evaporation ponds are primarily Rehobeth silty clay loam (USDA, 2005). Rehobeth soil properties include a pH ranging from 8 to 9 standard units and salinity (naturally occurring) typically measuring up to approximately 8 mmhos/cm. The Rehobeth soils are described as having a geomorphic position *"within flood plains and stream terraces on valley floors*." The parent material is described as "*stream alluvium derived from gypsiferous shale*." The permeability is "*slow*" (0.06 in/hr). The typical profile is as follows*:*

A (mineral horizon) — 0 to 2 inches; silty clay loam

Bw (B soil horizon, color or structure, but little illuvial accumulation) — 2 to 5 inches; silty clay loam

Bss (B soil horizon, alluvial accumulation) — 5 to 12 inches; clay

Bssny1 (B soil horizon, alluvial accumulation, sodium, gypsum) —12 to 18 inches; clay

Bssny2 (B soil horizon, alluvial accumulation, sodium, gypsum) —18 to 32 inches; clay

Bssny3 (B soil horizon, alluvial accumulation, sodium, gypsum) — 32 to 80 inches; clay

The southern end of the aeration lagoons and the OAPIS are mapped as being constructed within the bordering Simitarq-Celavar sandy loams. Simitarq soils have nearly neutral pH

values ranging from 7.2 to 7.4 standard units. The geomorphic position is described as "*summits on mesas and dipslopes on cuestas*", with a parent material of eolian material and slope alluvium over residuum derived from sandstone. The permeability is described as moderate (0.6 in/hour). The "t*ypical profile" is as follows:*

Oi (organic soil horizon, slightly decomposed)—0 to 1 inches;

A (mineral soil horizon) —1 to 2 inches; sandy loam

Bt (B soil horizon, argillic) — 2 to 11 inches; sandy clay loam

Btk1(B soil horizon, argillic, accumulation of calcium carbonate) — 11 to 27 inches; sandy clay loam

Btk2(B soil horizon, argillic, accumulation of calcium carbonate) —2 7 to 31 inches; sandy clay loam

R (bedrock) — 31 inches; sandstone bedrock

Regional surface water features include the refinery evaporation ponds and several small ponds (one cattle water pond and two small unnamed spring-fed ponds). Average annual rainfall is less than 10 inches per year, thus there are not many natural surface water bodies in this area. The site is located in the Rio Puerco valley, north of the Zuni Uplift with overland flows directed northward to the tributaries of the Rio Puerco river. The Rio Puerco river continues to the east to the confluence with the Rio Grande river. The South Fork of the Rio Puerco river is intermittent and retains flow only during and immediately following precipitation events.

There is very little vegetation throughout the area surrounding the Aeration Basin and OAPIS, with most surfaces composed of nearly bare dirt, gravel, concrete, or asphalt. The area between the refinery and the Rio Puerco River does have limited vegetation.

4.2 Subsurface Conditions

An underground pipeline is present in the western side of the Aeration Basin, which could act as a preferential pathway for contaminant migration to the west; however, it reaches the land surface only a short distance west of the Aeration Basin (Figure 2). Most of the other pipelines near the Aeration Basin and OAPIS are above ground but there are two (inlet and outlet) underground lines buried at a shallow depth near the OAPIS as indicated on Figure 3.

4.2.1 Geology

The shallow subsurface geology consists of fluvial and alluvial deposits comprised of clay and silt with minor inter-bedded sand layers, which overlie mudstone bedrock. These deposits are described in more detail below in descending order.

The Quaternary alluvium, which occurs at the land surface in the area of the Aeration Basin and OAPIS, is mapped regionally as a narrow band trending west-northwest and running just north of I-40 (Figure 5). The Quaternary alluvium is thought to be the parent material of the Rehobeth soils discussed above in Section 4.1. Two cross sections of the shallow subsurface in the immediate vicinity of the Aeration Basin and OAPIS are included as Figures 7 and Figure 8. As shown on the cross sections, the predominant lithology is silty clay with minor amounts of sand in varying proportions. Thin clayey sand lenses up to three to five feet in thickness are observed in the soil borings completed near the Aeration Basin and OAPIS, but the lenses are discontinuous. An isopach map of higher permeable materials (e.g., sand and gravel) was prepared for the sediments that immediately overlie the bedrock to determine if there is a laterally continuous layer of permeable materials present capable of transmitting groundwater and potential contaminants away from the Aeration Basin and/or OAPIS (Figure 9). As shown on the isopach map, there is not a laterally continuous layer of higher permeable materials present on top of the bedrock surface in the immediate vicinity of the Aeration Basin and the OAPIS. This is in contrast to the area further northwest near the Land Treatment Unit (LTU) where a sand layer up to 10 to 15 feet thick has been identified immediately overlying the bedrock (Precision Engineering, 1996). In the area of the LTU, a second sand layer up to 10 feet thick has also been identified, which is separated from the lower sand by a clay layer of 5 to 10 feet in the southern portion of the LTU. As shown on Figure 6 (Cross Section A-A'), these two sand bodies occur at a significantly lower elevation than the thin sand intervals identified near the Aeration Basin and OAPIS and do not appear to be stratigraphically equivalent.

A paleotopographic map, which is based on the current elevation of the top of the bedrock, was prepared to facilitate the evaluation of the deposition of the Quaternary alluvium (Figure 10). The surface of the bedrock slopes to the west and appears to be fairly uniform beneath the Aeration Basin. There is a significant depression of the surface elevation closer to the OAPIS as indicated in boring SWMU 14-1 and a second depressed area, possibly to a lesser extent, near the northwest corner of the Aeration Basin (boring SWMU 1-24). There is no obvious correlation between the surface of the bedrock and the presence of higher permeable materials in the overlying alluvium based on the available information.

Subcropping beneath the Quaternary alluvium is the Triassic Chinle Group, which is most likely the parent material of the Simitarq soils described above in Section 4.1 (Figure 5). The stratigraphy of the Chinle Group was described in detail for the nearby Fort Wingate quadrangle by Lucas et al, 1997. The Painted Desert Member of the Petrified Forest Formation is the

uppermost member of the Chinle Group present in the area of the refinery. The Painted Desert Member is described as reddish-brown and grayish red mudstone with minor beds of resistant, laminated or crossbedded, litharenite. This is consistent with the bedrock encountered at the refinery, as depicted on cross sections A-A', B-B', and C-C' (Figures 6, 7 and 8). Beneath the Painted Desert Member is the Sonsela Member, which is described by Lucas et al (1997) as gray to yellowish-brown, fine-grained to conglomeratic, crossbedded sandstone. The base of the Sonsela Member is recognized as a basin wide unconformity, which was termed the Tr-4 unconformity (Heckert and Lucas, 1996). The Blue Mesa Member, which underlies the Sonsela Member, is the lowest member of the Petrified Forest Formation and the lowest mappable unit shown on cross section A-A' (Figure 6). The Blue Mesa Member is described as mostly purple and greenish-gray mudstone.

4.2.2 Hydrogeology

As discussed above in Section 2.1.3, previous investigations of the occurrence of shallow groundwater near the Aeration Basin identified various groundwater-bearing units where more permeable horizons (e.g., clayey sand/sandy clay) are present within the generally low permeability deposits of the Quaternary alluvium. Generally, the potentiometric surface of the shallow groundwater in monitoring wells at the refinery follows the land surface (Figure 11). The presence of shallow groundwater in the area of the Aeration Basin and OAPIS appears to be associated with fluids managed in these two SWMUs. All of the deeper soil borings immediately surrounding the Aeration Basin encountered saturation or at least moist conditions where more permeable horizons (e.g., clayey sand) were present at elevations at or below the water levels in the Aeration Basin (Figure 7). Saturation was not encountered in similarly permeable soils at elevations above the water levels in the Aeration Basin, nor are any of the measured water levels in the shallow wells above the water levels in the Aeration Basin. Saturation was not encountered in borings (e.g., SWMU 14-1, SWMU 14-6, SWMU 14-7, SWMU 1-20, and SWMU 1-38) located further away from the Aeration Basin and OAPIS, with the exception of boring SWMU 14-23. There was an indication of saturation within a sandy clay interval in SWMU 14-23; however, no water was produced from a temporary well completion installed in the soil boring. In addition, as discussed above in Section 2.1.3, there have been low concentrations of constituents reported in shallow groundwater from samples collected nearby the Aeration Basin and OAPIS that have also been detected in water and sediment samples collected from the Aeration Basin. All of the evidence points to the Aeration Basin in particular as a source of recharge to the discontinuous permeable zones (e.g., clayey sand) that have been identified in

borings adjacent to the Aeration Basin. These saturated intervals produce very little water. Temporary well completions were installed in soil borings SWMU 1-2, SWMU 1-3, SWMU 1-4, SWMU 1-5, SWMU 1-6, SWMU 1-7, SWMU 1-8, SWMU 1-24, and SWMU 14-3. In every case, it was difficult to obtain sufficient volumes of water to complete scheduled sample collection activities and at SWMU 1-5, there was not a sufficient volume of water to allow analyses for all analytes.

The diverse properties and complex, irregular stratigraphy of the Quaternary alluvium across the refinery cause a wide range of hydraulic conductivity ranging from less than 10^{-2} cm/sec for gravel like sands immediately overlying the Painted Desert Formation to 10^{-8} cm/sec in the clay soils located near the surface (Western Refining, 2009). Permeability tests performed on the Quaternary alluvium beneath the nearby LTU indicated an average permeability of 1.9E-05 cm/sec (Appendix C). Permeability tests performed on soils in the area of the firewater pond indicated an average permeability of 1.1E-07 cm/sec (Appendix C).

As described above, the bedrock (i.e., Petrified Forest Formation) is mainly composed of low permeability materials (e.g., mudstone) with the exception of the Sonsela Member and some thinner sandstones within the overlying Painted Desert Member. Yield tests, including slug tests and pumping tests have been performed at the refinery to estimate the hydraulic conductivity of the Painted Desert Member (Appendix C). A slug test performed on July 3, 1984 in well OW-4 indicated a hydraulic conductivity of 4.0E-7 cm/sec. A pump test was performed in well OW-24 on February 20, 1985 and it yielded a hydraulic conductivity of 2.5E-7 cm/sec. The Painted Desert Member appears to be a competent aquitard to reduce the potential for downward migration of contaminants from groundwater that may occur within the overlying Quaternary alluvium.

The Sonsela Member is identified as the uppermost aquifer for RCRA monitoring purposes at the LTU because the overlying groundwater bearing units are not capable of supplying sufficient quantities of groundwater to meet the definitions of an aquifer. Wells completed in a thinner permeable sandstone layer within the Painted Desert Member are also monitored near the LTU as a potential early warning network. The Sonsela's highest point occurs southeast of the site and slopes downward to the northwest as it passes under the refinery. The Sonsela Member forms a water-bearing reservoir with artesian conditions throughout the central and western portions of the refinery property (Western, 2009). Aquifer test of the Sonsela Member conducted northeast of Prewitt indicated a transmissivity of greater than 100 ft^2/day (Stone and others,

1983). Yield tests conducted at the site have shown a much lower hydraulic conductivity of 0.34 ft/day (1.2E-04 cm/sec) (Appendix C).

4.3 Exploratory Drilling Investigations, Soil Sampling and Boring Abandonment

This subsection provides a description of surface and subsurface investigations to locate potential impacts to soils and also the potential for soil impacts to have migrated vertically to the underlying groundwater. This includes soil field screening results, soil sampling intervals and methods for detection of surface and subsurface impacts in soils.

4.3.1 Aeration Basin Soil Investigation

The deeper soil borings (i.e., those scheduled to penetrate deeper than two feet) were drilled using the hollow-stem auger (HSA) method and a general description of the exploratory drilling activities is as follows. The drilling equipment was decontaminated between each borehole, as described in Appendix B. All deep soil borings were drilled to the top of saturation and extended deeper if multiple zones of saturation were encountered to reach the sand layer identified in GWM-1 at a depth of 21.5 feet, which lies on top of the Petrified Forest Formation (i.e., bedrock). All of the originally scheduled deep soil borings (i.e., SWMU 1-1 through SWMU 1-8) and three additional deep borings (SMWU 1-20, SWMU 1-37, and SWMU 1-38) reached the top of bedrock. One additional deep soil boring (SWMU 1-24) did not reach bedrock but was terminated after drilling to a depth of 34 feet with steadily decreasing signs of potential impacts based on field screening and penetrating six feet below the bottom of saturation.

Discrete soil samples were collected for laboratory analyses at the following intervals:

- 0-6” (at soil borings with evidence of significant impacts near the land surface and all hand auger locations);
- 18-24” (at soil borings with evidence of significant impacts near the land surface and all hand auger locations, except where refusal was reached at a shallower depth);
- > 24” (from the interval in each soil boring with the greatest apparent degree of contamination, based on field observations and field screening);
- From a one-foot interval, which lies approximately five feet below the bottom of the Aeration Basin (all deep soil borings);
- From the bottom of each borehole (all soil borings);

- From the 6” interval at the top of saturation (all borings that encountered saturated soils) and
- Many additional soil samples were collected from:
  - zones that are sandy or silty;
  - intervals with apparent impacts based on field screening in addition to the interval with the greatest apparent impacts; and
  - in borings with multiple saturated intervals, soils samples were collected from each discrete saturated interval.

The installation of soil borings and collection of soil samples is discussed below in numerical order for the samples collected near the Aeration Basin. A description of the field screening and soil sampling procedures are presented in Appendix B – Field Methods. Copies of the boring logs are provided in Appendix D. In addition to being included on the soil boring logs, the soil vapor (i.e., headspace) screening results are summarized in Table 3. The locations of the soil borings appear on Figure 2.

SWMU 1-1

On October 5, 2012 the drilling rig was set up on location SWMU 1-1. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 2 - 4 feet, 10 - 12 feet and 13 - 14 feet bgl. Petroleum hydrocarbon odor and elevated photoionization detector (PID) readings were observed from 2 - 14 feet bgl. Discoloration (i.e., black staining) was observed from 2 - 4 feet bgl.

The lithology encountered consisted of surficial silty clay fill from 0 - 4 feet bgl. There was no recovery in the interval from 4 - 6 feet bgl. Soft, low plastic clay was encountered from 6 - 8 feet bgl. A very stiff, high plastic clay was encountered from 8 - 13 feet bgl. A very dense, dry, gray sandstone (Chinle Group- Painted Desert Member) was encountered from 13 - 14 feet bgl. The sampling terminated at 14 feet bgl. A temporary PVC well was installed with the screened interval ranging from 3 to 8 feet. No groundwater was detected in the temporary well. On October 9, 2012 the well was removed, the borehole was re-reamed and a temporary PVC well was reset with 10 feet of screen set from 2 - 12 feet. No groundwater was detected in the well. The well was pulled and the borehole was grouted on October 11, 2012.

SWMU 1-2

On October 2, 2012 the drilling rig was set up on location SWMU 1-2. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 6 - 8 feet bgl, 10 - 11 feet bgl, 14 - 16 feet bgl, 17 - 17.25 feet bgl and 19.5 - 20 feet bgl. No odors were evident from 0 - 16 feet bgl. Petroleum hydrocarbon odors were evident from 16 - 19.5 feet bgl. The highest PID reading (7.2 ppm) was observed from 17 - 17.25 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 8 feet bgl. There was no recovery in the interval from 8 - 10 feet bgl, (the empty sampling spoon was dripping with water). Saturated, fine grain clayey sand was encountered from 10 - 11.5 feet bgl. Moderate to low plastic clay was encountered from 11.5 - 12 feet bgl. Reddish brown, high plastic, firm clay was encountered from 12 - 14 feet bgl. A saturated, fine grain, clayey sand was encountered from 14 - 16 feet bgl. High plastic, firm, brown clay was encountered from 16 - 19.5 feet bgl. Two saturated, clayey sand seams were observed within the clay at 17 - 17.25 feet bgl and 18.50 - 18.75 feet bgl. A dense, dry, gray/reddish brown mudstone /sandstone (Painted Desert Member of Petrified Forest Formation) was encountered from 19.5 - 20 feet bgl. The sampling terminated at 20 feet bgl. A groundwater sample was collected from within the augers and the borehole was grouted.

SWMU 1-3

On October 2, 2012 the drilling rig was set up on location SWMU 1-3. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 2 - 4 feet bgl, 10 - 11 feet bgl, 11 - 11.25 feet bgl, 18.5 - 19.25 feet bgl and 19.5 - 20 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-3. The highest PID reading (21.3 ppm) was observed from 2 - 4 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 11 feet bgl. A saturated, clayey sand seam was encountered from 11 - 11.25 feet bgl. High plastic, firm, reddish brown clay was encountered from 11.25 - 17 feet bgl. A damp to saturated, sandy clay / clayey sand was encountered from 17 - 19.5 feet bgl. A very dense, dry, reddish brown mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 19.5 - 20 feet bgl. The sampling terminated at 20 feet bgl. A temporary well was installed at this location with the

screened interval ranging from 15 - 20 feet bgl. A groundwater sample was collected on October 3, 2012. The well was pulled and the borehole was grouted.

SWMU 1-4

On October 3, 2012 the drilling rig was set up on location SWMU 1-4. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 8 - 10 feet bgl, 10 - 12 feet bgl (duplicate), 17 - 18 feet bgl, and 23 - 24 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from 0 - 14 feet bgl. Petroleum hydrocarbon odors were evident in the samples collected from 16 - 23 feet bgl. The highest PID reading (16.4 ppm) was observed from 17 - 18 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 10 feet bgl. A moist to saturated, clayey sand seam was encountered from 10 - 12 feet bgl. Silty clay was encountered from 12 - 14 feet bgl. There was no recovery in the interval from 14 - 16 feet bgl. Silty clay with black staining was encountered from 16 - 17 feet bgl. Moist to saturated sandy clay / clayey sand was encountered from 17 - 20 feet bgl. High plastic, reddish brown clay was encountered from 20 - 23 feet bgl. A dry, reddish brown / gray mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 23 - 24 feet bgl. The sampling terminated at 24 feet bgl. A temporary well was installed at this location with the screened interval ranging from 16 - 21 feet bgl. A groundwater sample (volatiles and semi-volatiles) was collected on October 4, 2012. A groundwater sample (metals) was collected on October 5, 2012. The well was pulled and the borehole was grouted.

SWMU 1-5

On October 3, 2012 the drilling rig was set up on location SWMU 1-5. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Six soil samples were collected from 10 - 12 feet bgl, 14 - 16 feet bgl, 16 - 18 feet bgl, 24 - 25 feet bgl, 26 - 27 feet bgl and 27 - 28 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-5. The highest PID reading (16.1 ppm) was observed from 16 - 18 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 10 feet bgl. Clayey sand / silty clay / sandy clay was encountered from 10 - 16 feet bgl. A low plastic, gravelly clay was encountered from 16 - 26 feet bgl. Saturated, clayey sand was encountered from 26 - 27 feet bgl. A very dense, dry, gray, weathered mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 27 - 28 feet bgl. The sampling terminated at 28 feet bgl. A

temporary well was installed on October 4, 2012 at this location with the screened interval ranging from 23 - 28 feet bgl. A groundwater sample (volatiles and semi-volatiles) was collected on October 5, 2012. The well was pulled and the borehole was grouted.

SWMU 1-6

On October 4, 2012 the drilling rig was set up on location SWMU 1-6. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Six soil samples were collected from 2 - 4 feet bgl (duplicate), 4 - 6 feet bgl, 7.5 - 8 feet bgl, 10 - 11 feet bgl and 11 - 12 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-6. The highest PID reading (37.5 ppm) was observed from 2 - 4 feet bgl.

The lithology encountered consisted of surficial silty clay / gravel from 0 - 4 feet bgl. Saturated clayey sand was encountered from 4 - 7.5 feet bgl. Silty clay was encountered from 7.5 - 9 feet bgl. Saturated clayey sand was encountered from 9 - 11 feet bgl. A very dense, dry, reddish brown and gray mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 11 - 12 feet bgl. The sampling terminated at 12 feet bgl. A temporary well was installed with the screened interval ranging from 7 - 12 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-7

On October 4, 2012 the drilling rig was set up on location SWMU 1-7. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 12 - 14 feet bgl, 14 - 16 feet bgl, and 16 - 18 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-7. The highest PID reading (7.6 ppm) was observed from 0 - 2 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 12 feet bgl. High plastic clay with saturated clayey sand seams was encountered from 12 - 16 feet bgl. A very dense, dry, reddish brown and gray clay / mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 16 - 18 feet bgl. The sampling terminated at 18 feet bgl. A temporary well was installed with the screened interval ranging from 13 - 18 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-8

On October 5, 2012 the drilling rig was set up on location SWMU 1-8. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Six soil samples were collected from 4 - 6 feet bgl, 10 - 12 feet bgl, 12 - 14 feet bgl, 16 - 18 feet bgl (duplicate) and 19 - 20 feet bgl. Petroleum hydrocarbon odors were evident in the samples collected from 4 - 6 feet bgl and 12 - 19 feet bgl. The highest PID reading (161 ppm) was observed from 12 - 14 feet bgl.

The lithology encountered consisted of surficial silty clay fill from 0 - 4 feet bgl. Saturated clayey sand was encountered from 4 - 6 feet bgl. Silty clay was encountered from 6 - 13 feet bgl. Saturated clayey sand was encountered from 13 - 19 feet bgl. A very dense, dry to damp, reddish brown / gray mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 19 - 20 feet bgl. The sampling terminated at 20 feet bgl. A temporary well was installed with the screened interval ranging from 13 - 18 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-9

On October 15, 2012 location SWMU 1-9 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-9. The highest PID reading (7.0 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 0.5 feet bgl. Silty sand fill was encountered from 0.5 - 1.5 feet bgl. The boring was terminated in silty clay encountered from 1.5 - 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-10

On October 15, 2012 location SWMU 1-10 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-10. The highest PID reading (10.1 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 0.5 feet bgl. Silty sand fill was encountered from 0.5 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-11

On October 15, 2012 location SWMU 1-11 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-11. The highest PID reading (38.9 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-12

On October 15, 2012 location SWMU 1-12 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 0.5 - 1 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-12. The highest PID reading (63 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 1 feet bgl. The boring was terminated at 1 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-13

On October 12, 2012 the drilling rig was set up on location SWMU 1-13. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 2 - 4 feet bgl, and 4 - 6 feet bgl (duplicate). No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-13. The highest PID reading (35.7 ppm) was observed from 2 - 4 feet bgl. The lithology encountered consisted of surficial silty clay fill from 0 - 6 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-14

On October 15, 2012 location SWMU 1-14 was sampled using a hand auger. The samples were collected from the auger bucket. Three soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl (duplicate). Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-14. The highest PID reading (5.7 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 1 feet bgl and

clay fill from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-15

On October 15, 2012 location SWMU 1-15 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-15. The highest PID reading (9.3 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of surficial silt / silty clay fill from 0 - 1 feet bgl and clay fill from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-16

On October 15, 2012 location SWMU 1-16 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-16. The highest PID reading (7.7 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silt / gravel fill from 0 - 1 feet bgl and silty clay / gravel fill from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-17

On October 15, 2012 location SWMU 1-17 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1 - 1.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-17. The highest PID reading (9.5 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silt / gravel fill from 0 - 0.5 feet bgl and silty clay fill from 0.5 - 1.5 feet bgl. The boring was terminated at 1.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-18

On October 16, 2012 location SWMU 1-18 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1 - 1.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from

SWMU 1-18. The highest PID reading (8.2 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silt / gravel fill from 0 - 0.5 feet bgl and silty clay fill from 0.5 - 1.5 feet bgl. The boring was terminated at 1.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-19

On October 16, 2012 location SWMU 1-19 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-19. The PID reading (4.1 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silt from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-20

On October 11, 2012 the drilling rig was set up on location SWMU 1-20, which was an additional location selected west of the Aeration Basin to help define the lateral extent of potential impacts observed in SWMU 1-4. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl (duplicate), 1.5 - 2 feet bgl, 4 - 6 feet bgl, and 10 - 12 feet bgl (duplicate). No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-20. The highest PID reading (21.7 ppm) was observed from 0 - 2 feet bgl. The lithology encountered consisted of silt / silty clay from 0 - 2 feet bgl. Silty clay was encountered from 2 - 10 feet bgl. A very dense, dry to damp, reddish brown mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 10 - 12 feet bgl. The sampling terminated at 12 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-21

On October 16, 2012 location SWMU 1-21, which was shifted west of the its original location, was sampled with a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl (duplicate). Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-21. A PID reading of 1.4 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silt from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-22

On October 16, 2012 location SWMU 1-22, which was shifted west of its original location, was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-22. The highest PID reading (6.8 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of silt from 0 - 0.5 feet bgl and silty clay from 0.5 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-23

On October 16, 2012 location SWMU 1-23 was sampled using a hand auger. This boring was moved west of its original location due to earlier field indications of potential impacts at SWMU 1-4 and SWMU 1-24. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-23. The PID reading (3.7 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silt /gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-24

On October 8, 2012 the drilling rig was set up on location SWMU 1-24. This location was an additional deep boring installed between SWMU 1-4 to the south and SWMU 1-5 to the north to better define potential impacts in this area. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Seven soil samples were collected from 0 - 0.5 feet bgl (duplicate), 1.5 - 2 feet bgl, 10.5 - 11.5 feet bgl, 16 - 18 feet bgl, 24 - 26 feet bgl and 32 - 34 feet bgl. Petroleum hydrocarbon odors were evident in the samples collected from 18 - 32 feet bgl. The highest PID reading (28 ppm) was observed from 16 - 18 feet bgl.

The lithology encountered consisted of surficial silty clay fill from 0 - 16 feet bgl. Damp, clayey sand was encountered within the silty clay at the 10.5 - 11.5 feet bgl interval. Sandy clay / clayey sand was encountered from 16 - 20 feet bgl. Clayey silt was encountered from 20 - 24 feet bgl. The interval from 24 - 28 feet contained clayey silt and sand and was observed to be saturated to very moist. Black discoloration (possible staining from petroleum hydrocarbons) was also observed from 20 to 34 feet bgl. Damp, very dense clayey sand / gravel was

encountered from 30 - 34 feet bgl. The sampling terminated at 34 feet bgl. A temporary well was installed on October 9, 2012 with the screened interval ranging from 16 - 26 feet bgl. A groundwater sample was collected on October 10, 2012. The well was pulled and the borehole was grouted on October 11, 2012.

SWMU 1-25

On October 16, 2012 location SWMU 1-25 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 0.5 - 1 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-25. The highest PID reading (4.7 ppm) was observed from 0.5 - 1 feet bgl. The lithology encountered consisted of sand / gravel fill from 0 - 1 feet bgl. The boring was terminated at 1 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-26

On October 16, 2012 location SWMU 1-26 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-26. A PID reading of 6.5 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-27

On October 12, 2012 the drilling rig was set up on location SWMU 1-27. This location was originally to be completed with a hand auger, but the drilling rig was used to allow deeper penetration to help define any potential impacts observed in boring SWMU 1-6. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-27. The highest PID reading (18.2 ppm) was observed from 2 - 4 feet bgl. The lithology encountered consisted of silty clay fill from 0 - 4 feet bgl. The sampling terminated at 4 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-28

On October 12, 2012 the drilling rig was set up on location SWMU 1-28. This location was originally to be completed with a hand auger, but the drilling rig was used to allow deeper penetration to help define any potential impacts observed in boring SWMU 1-6. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl (duplicate). No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-28. The highest PID reading (4.8 ppm) was observed from 2 - 4 feet bgl. The lithology encountered consisted of silty clay fill from 0 - 2 feet bgl and clayey gravelly sand from 2 - 4 feet bgl. The sampling terminated at 4 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-29

On October 16, 2012 location SWMU 1-29 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-29. A PID reading of 3.6 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-30

On October 12, 2012 the drilling rig was set up on location SWMU 1-30. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, and 4 - 6 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-30. The highest PID reading (6.7 ppm) was observed from 4 - 6 feet bgl. The lithology encountered consisted of silty clay fill from 0 - 4 feet bgl and clayey sand from 4 - 6 feet bgl. The sampling terminated at 6 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-31

On October 16, 2012 location SWMU 1-31 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-31. A PID reading of 3.9 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted

of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-32

On October 16, 2012 location SWMU 1-32 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl (duplicate). Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-32. A PID reading of 0.7 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-33

On October 16, 2012 location SWMU 1-33 was sampled. Sample collection was accomplished using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-33. A PID reading of 3.1 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-34

On October 16, 2012 location SWMU 1-34 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-34. A PID reading of 3.2 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-35

On October 12, 2012 the drilling rig was set up on location SWMU 1-35. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, and 4 - 6 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-35. The highest PID

reading (4.7 ppm) was observed from 2 - 4 feet bgl. The lithology encountered consisted of silty clay fill from 0 - 4 feet bgl and silty clay / clayey silt from 4 - 6 feet bgl. The sampling terminated at 6 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-36

On October 16, 2012 location SWMU 1-36 was sampled using a hand auger. The sample was collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-36. A PID reading of 1.9 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-37

On October 10, 2012 the drilling rig was set up on location SWMU 1-37. This was an additional deep boring installed southwest of boring SWMU 1-2. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Seven soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 8 - 8.5 feet bgl, 8.5 - 9 feet bgl, 12 - 13 feet bgl, 13 - 14 feet bgl, and 17 - 18 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-37. The highest PID reading (16.6 ppm) was observed from 6 - 8 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 7 feet bgl. High plastic clay was encountered from 7 - 16 feet bgl. Encountered at 8.5 - 9 feet bgl and 12 - 13 feet bgl were saturated clayey sands. No petroleum hydrocarbon discoloration or odors were associated with these sands. The boring was terminated in a very dense, dry, gray, clay / mudstone (Painted Desert Member of Petrified Forest formation). The sampling terminated at 18 feet bgl. A temporary well was installed with the screened interval ranging from 10 - 15 feet bgl. A groundwater sample was collected on October 11, 2012. The well was pulled and the borehole was grouted on October 11, 2012.

SWMU 1-38

On October 11, 2012 the drilling rig was set up on location SWMU 1-38. This additional location was selected west of SWMU1-4 to help define the lateral extent of any impacts observed in borings SWMU 1-4 and 1-24. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl,

1.5 - 2 feet bgl, and 6 - 8 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-38. The highest PID reading (11.7 ppm) was observed from 6 - 8 feet bgl. The lithology encountered consisted of silt / silty clay from 0 - 2 feet bgl and silty clay 2 - 6 feet bgl. A very dense, dry, reddish brown / gray, mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 6 - 8 feet bgl. The sampling terminated at 8 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-39

On October 16, 2012 location SWMU 1-39 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-39. The PID reading (4.4 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silt / gravel fill from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

4.3.2 Old API Separator

The deeper soil borings (i.e., those scheduled to penetrate deeper than two feet) were drilled using the HAS drilling method and a general description of the exploratory drilling activities is as follows. The drilling equipment was decontaminated between each borehole, as described in Appendix B. All scheduled deep soil borings were drilled to a minimum depth of 10 feet pursuant to the investigation work plan with the exception of locations SWMU 14-5 and SWMU 14-8, which had to be installed with a hand auger due to access limitations. None of the soil borings encountered bedrock near the OAPIS even though the boring at SWMU 14-1 reached a depth of 50 feet bgl. Additional soil borings (SWMU 14-6, SWMU 14-21, SWMU 14-22, SWMU 14-23, and SWMU 14-24) were completed to delineate the lateral extent of potential impacts to the east, south, and west of the OAPIS.

Discrete soil samples were collected for laboratory analysis from the following intervals:

- 0-0.5’ (all borings);
- 1.5-2.0’ (all borings except SWMU 14-20 where refusal was reached at a depth of 1 foot);
- From the 6” interval at the top of saturation, if encountered;

- A sample from each boring in the interval with the greatest apparent degree of contamination, based on field observations and field screening;
- The 6" interval at the bottom of each boring except SWMU 14-23 where there was no sample recovery in the bottom 4 foot of the boring; however, saturation was encountered in this boring and a sample was collected from the 6" interval at the top of saturation instead pursuant to the investigation work plan; and
- Additional soil samples were collected from:
  - Zones that are sandy or silty; and
  - Intervals with apparent impacts based on field screening in addition to the interval with the greatest apparent impacts

The installation of soil borings and collection of soil samples is discussed below in numerical order for the samples collected near the OAPIS. A description of the field screening and soil sampling procedures are presented in Appendix B – Field Methods. Copies of the boring logs are provided in Appendix D. In addition to being included on the soil boring logs, the soil vapor (i.e., headspace) screening results are summarized in Table 3. The locations of the soil borings appear on Figure 3.

SWMU 14-1

On July 16, 2012 the drilling rig was set up on location SWMU 14-1. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from the following intervals on July 16, 2012; 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, and 10 - 12 feet bgl. Sampling was stopped for the day at 30 feet bgl.

On July 17, 2012 the crew returned to SWMU 14-1. There was no groundwater observed in the borehole. Sampling resumed and an additional sample was collected from the interval 48 - 50 feet bgl. The sampling was terminated at 50 feet bgl.

No petroleum hydrocarbon odors were observed in the soil samples from SWMU 14-1. The highest PID reading (105.9 ppm) was observed from 10 - 12 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 8 feet bgl. High plastic clay was encountered from 8 - 12 feet bgl. A low to moderate plastic silty clay was encountered from 12 - 36 feet bgl. A fine grain, poorly cemented, reddish brown sandstone was encountered from 36 - 38 feet bgl. Encountered from 38 to 50 feet bgl was silty clay / clay with low plasticity and very stiff. The borehole was grouted on July 18, 2012.

SWMU 14-2

On July 17, 2012 the drilling rig was set up on location SWMU 14-2. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Six soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 8 - 10 feet bgl (duplicate), 16 - 18 feet bgl, and 24 - 25 feet bgl. Petroleum hydrocarbon odors were evident in the samples collected from 1.5 - 13 feet bgl. Discoloration (black staining) was apparent from 1.5 - 13 feet bgl. The highest PID reading (330 ppm) was observed from 8 - 10 feet bgl.

The lithology encountered consisted of surficial clay / gravel from 0 - 1.5 feet bgl. Moderate plastic clay was encountered from 1.5 - 2 feet bgl. Low plastic, silty clay was encountered from 2 - 13 feet bgl. Moderate plastic, stiff, reddish brown clay was encountered from 13 - 25 feet bgl. A temporary PVC well screen was installed on July 17 and it was replaced with a permanent well completion on July 19, 2012.

SWMU 14-3

On July 18, 2012 the drilling rig was set up on location SWMU 14-3. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 8 - 10 feet bgl, 12 - 14 feet bgl, and 25.5 - 26 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 2 - 20 feet bgl. Discoloration (black staining) was apparent from 2 - 14 feet bgl. The highest PID reading (343 ppm) was observed from 8 - 10 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 14 feet bgl. Moderate plastic clay was encountered from 14 - 24 feet bgl. Groundwater was observed in the sampling spoon from the 14 - 16 feet bgl interval. Low plastic silty clay was encountered from 24 - 26 feet bgl. The sampling was terminated at 26 feet bgl. A groundwater sample was collected from the augers. The borehole was grouted.

SWMU 14-4

On July 17, 2012 the drilling rig was set up on location SWMU 14-4. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Four soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 10 - 12 feet bgl, and 19.5 - 20 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 6 - 14 feet bgl. Discoloration was apparent from 8 - 10 feet bgl. The highest PID reading (711 ppm) was observed from 10 - 12 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 14 feet bgl. Moderate plastic clay was encountered from 14 - 20 feet bgl. The sampling was terminated at 20 feet bgl. Groundwater was not observed in this boring.

SWMU 14-5

On July 19, 2012 location SWMU 14-5 was sampled using a hand auger. The samples were collected from the auger bucket. Three soil samples were collected from 0 - 0.5 feet bgl (duplicate) and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 14-5. The highest PID reading (7.4 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of gravel / clay from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-6

On October 9, 2012 the drilling rig was set up on location SWMU 14-6. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Four soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 10 - 12 feet bgl, and 17 - 18 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 4 - 14 feet bgl. Discoloration (black staining) was apparent from 4 - 8 feet bgl. The highest PID reading (367 ppm) was observed from 10 - 12 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 8 feet bgl. A high plastic clay was encountered from 8 - 18 feet bgl. Sampling was terminated at 18 feet bgl and the borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-7

On July 18, 2012 the drilling rig was set up on location SWMU 14-7. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Four soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 6 - 8 feet bgl, and 23.5 - 24 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 0 - 18 feet bgl. The highest PID reading (935 ppm) was observed from 6 - 8 feet bgl.

The lithology encountered consisted of gravel / clay fill from 0 - 2 feet bgl and then silty clay from 2 - 6 feet bgl. High plastic clay was encountered from 6 - 16 feet bgl. Clayey sand / sandy clay was encountered from 16 - 20 feet bgl. High plastic, very stiff, dry, reddish brown clay was

encountered from 20 to 24 feet bgl. The sampling was terminated at 24 feet bgl and the borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-8

On July 19, 2012 location SWMU 14-8 was sampled using a hand auger. The samples were collected from the auger bucket. Three soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl (duplicate). Petroleum hydrocarbon odors and discoloration were evident in the samples collected from 0 - 2 feet bgl. The highest PID reading (3,717 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of gravel / clay / sand from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-9

On July 18, 2012 the drilling rig was set up on location SWMU 14-9. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl (duplicate), 1.5 - 2 feet bgl, 4 - 6 feet bgl, and 13 - 14 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 1 - 8 feet bgl. The highest PID reading (1959 ppm) was observed from 4 - 6 feet bgl.

The lithology encountered consisted of silt / gravel / clay fill from 0 - 4 feet bgl. A moderate to low plastic sandy / silty clay was encountered from 4 - 10 feet bgl. High plastic, stiff, brown clay was encountered from 10 - 13 feet bgl. The sampling was terminated at 14 feet bgl in low plastic, stiff, silty clay. The borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-10

On July 19, 2012 location SWMU 14-10 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the samples collected from SWMU 14-10. The highest PID reading (0.4 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of gravel / clay fill from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-11

On July 19, 2012 location SWMU 14-11 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the samples collected from SWMU 14-11. The highest PID reading (38.5 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of gravel / clay fill from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-12

On July 19, 2012 location SWMU 14-12 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the samples collected from 0 - 2 feet bgl. The highest PID reading (1,094 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of high plastic, soft clay from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-13

On July 19, 2012 location SWMU 14-13 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the samples collected from 0 - 2 feet bgl. The highest PID reading (975 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of high plastic, soft clay from 0 - 2 feet bgl with a sand lens present from 0.75 - 1.25 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-14

On July 19, 2012 location SWMU 14-14 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the samples collected from 0 - 2 feet bgl. The highest PID reading (1,028 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of low plastic, soft clay from

0 - 1 feet bgl and fine grain clayey sand from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-15

On July 19, 2012 location SWMU 14-15 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the sample collected from 1 - 2 feet bgl. The highest PID reading (5,000 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of sandy fill from 0 - 1 feet bgl and fine grain clayey sand from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-16

On July 19, 2012 location SWMU 14-16 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the sample collected from 1 - 2 feet bgl. The highest PID reading (375.5 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of silt / sand fill from 0 - 1 feet bgl and high plastic clay from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-17

On July 19, 2012 location SWMU 14-17 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the sample collected from 1 - 2 feet bgl. The highest PID reading (898 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of silt / clay fill from 0 - 1 feet bgl and high plastic clay from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-18

On July 19, 2012 location SWMU 14-18 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were

evident in the sample collected from 1 - 2 feet bgl. The highest PID reading (2,537 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of silt / sand / gravel fill from 0 - 1 feet bgl and fine grain clayey sand from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-19

On July 19, 2012 location SWMU 14-19 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors or discoloration (e.g., black staining) were evident in the samples collected from SWMU 14-19. The highest PID reading (5.1 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of silt / sand / clay fill from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-20

On July 19, 2012 location SWMU 14-20 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl (duplicate). No petroleum hydrocarbon odors or discoloration were evident in the sample collected from SWMU 14-20. A PID reading of 2.0 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of very compacted gravel / sand fill. The boring was terminated at 0.5 feet bgl due to refusal. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-21

On October 9, 2012 the drilling rig was set up on location SWMU 14-21. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, and 8 - 10 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the sample collected from SWMU 14-21. The highest PID reading (10.5 ppm) was observed from 0 - 1 feet bgl.

The lithology encountered consisted of low plastic silty clay from 0 - 10 feet bgl. The sampling was terminated at 10 feet bgl and the borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-22

On October 9, 2012 the drilling rig was set up on location SWMU 14-22. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 4 - 6 feet bgl (duplicate) and 8 - 10 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the sample collected from SWMU 14-22. The highest PID reading (7.9 ppm) was observed from 4 - 6 feet bgl.

The lithology encountered consisted of low to moderate plastic silty clay from 0 - 10 feet bgl. The sampling was terminated at 10 feet bgl and the borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-23

On October 10, 2012 the drilling rig was set up on location SWMU 14-23. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Four soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 12 - 14 feet bgl, and 14 - 16 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 6 - 18 feet bgl. The highest PID reading (398 ppm) was observed from 12 - 14 feet bgl.

The lithology encountered consisted of silty clay fill from 0 - 6 feet bgl. A clayey silt / sand was encountered from 6 - 8 feet bgl. Moderate plastic, silty clay was encountered from 8 - 10 feet bgl. A high plastic silty clay was encountered from 10 - 16 feet bgl. Moderate plastic, very dense sandy clay was encountered from 16 to18 feet bgl with water observed within the sampling spoon. There was no recovery of the samples collected from 18 - 22 feet bgl. The boring was terminated at 22 feet bgl. A temporary well was installed with the screened interval being set from 15 - 20 feet bgl. The formation did not yield water to the well. The well was pulled on October 11, 2012 and the borehole was grouted.

SWMU 14-24

On October 17, 2012 location SWMU 14-24 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the samples collected from SWMU 14-24. The highest PID reading (4.0 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of a low plastic silty clay. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

4.4 Monitoring Well Construction and Groundwater Sampling

This section describes the methods and details of monitoring well construction and the collection of groundwater samples. The description includes the dates of well construction. The wells and groundwater samples are discussed in numerical order of the associated soil borings. Copies of the boring and well construction logs are provided in Appendix D. The well development and purging procedures and groundwater sample collection procedures are discussed in Appendix B. The locations of the monitoring wells and borings from which groundwater samples were collected appear on Figures 2 and 3.

4.4.1 Aeration Basin

SWMU 1-2

On October 2, 2012 the drilling rig was set up on location SWMU 1-2. The soil boring was drilled using the HSA drilling method. Saturated, fine grain clayey sand was encountered from 10 - 11.5 feet bgl. A saturated, fine grain, clayey sand was encountered from 14 - 16 feet bgl. Two saturated, clayey sand seams were observed within the clay at 17 - 17.25 feet bgl and 18.50 - 18.75 feet bgl. The boring was terminated in dense, dry, gray/reddish brown mudstone /sandstone (Petrified Forest Formation) at 20 feet bgl. A groundwater sample was collected from within the augers and the borehole was grouted.

SWMU 1-3

On October 2, 2012 the drilling rig was set up on location SWMU 1-3. The boring was completed using the HSA drilling method. A saturated, clayey sand seam was encountered from 11 - 11.25 feet bgl. A damp to saturated, sandy clay / clayey sand was encountered from 17 - 19.5 feet bgl. The boring was terminated in very dense, dry, reddish brown mudstone (Petrified Forest Formation) –at a depth of 20 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed at this location with the screened interval ranging from 15 - 20 feet bgl. A groundwater sample was collected on October 3, 2012. The well was pulled and the borehole was grouted.

SWMU 1-4

On October 3, 2012 the drilling rig was set up on location SWMU 1-4. The HSA drilling method was used to drill the soil boring. A moist to saturated, clayey sand seam was encountered from 10 - 12 feet bgl. Moist to saturated sandy clay / clayey sand was encountered from 17 - 20 feet

bgl. The boring was terminated in dry, reddish brown / gray mudstone (Petrified Forest Formation) –at a depth of 24 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed at this location with the screened interval ranging from 16 - 21 feet bgl. A groundwater sample (volatiles and semi-volatiles only were collected due to low sample volume) was collected on October 4, 2012. A groundwater sample (metals) was collected on October 5, 2012. The well was pulled and the borehole was grouted.

SWMU 1-5

On October 3, 2012 the drilling rig was set up on location SWMU 1-5. The soil boring was drilled using the HSA drilling method. Saturated, clayey sand was encountered from 26 - 27 feet bgl. The boring was terminated in very dense, dry, gray, weathered mudstone (Petrified Forest Formation) –at a depth of 28 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed on October 4, 2012 at this location with the screened interval ranging from 23 - 28 feet bgl. A groundwater sample (volatiles and semi-volatiles only due to low sample volume) was collected on October 5, 2012. The well was pulled and the borehole was grouted.

SWMU 1-6

On October 4, 2012 the drilling rig was set up on location SWMU 1-6. The boring was completed using the HSA drilling method. Saturated clayey sand was encountered from 4 - 7.5 feet bgl and 9 - 11 feet bgl. The borehole was terminated in very dense, dry, reddish brown and gray mudstone (Petrified Forest Formation) –at a depth of 12 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 7 - 12 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-7

On October 4, 2012 the drilling rig was set up on location SWMU 1-7. The HSA drilling method was used to drill the soil boring. High plastic clay with saturated clayey sand seams was encountered from 12 - 16 feet bgl. The boring was terminated in very dense, dry, reddish brown and gray clay / mudstone (Petrified Forest Formation) –at a depth of 18 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 13 - 18 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-8

On October 5, 2012 the drilling rig was set up on location SWMU 1-8. The soil boring was completed using the HSA drilling method. Saturated clayey sand was encountered from 4 - 6 feet bgl and from 13 - 19 feet bgl. The boring was terminated in very dense, dry to damp, reddish brown / gray mudstone (Petrified Forest Formation) –at a depth of 20 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 13 - 18 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-24

On October 8, 2012 the drilling rig was set up on location SWMU 1-24. This location was an additional deep boring installed between SWMU 1-4 to the south and SWMU 1-5 to the north to better define potential impacts in this area. The boring was completed using the HSA drilling method. Damp, clayey sand was encountered within the silty clay at the 10.5 - 11.5 feet bgl interval. The interval from 24 - 28 feet contained clayey silt and sand and was observed to be saturated to very moist. Damp, very dense clayey sand / gravel was encountered from 30 - 34 feet bgl. The boring terminated at 34 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed on October 9, 2012 with the screened interval ranging from 16 - 26 feet bgl. A groundwater sample was collected on October 10, 2012. The well was pulled and the borehole was grouted on October 11, 2012.

SWMU 1-37

On October 10, 2012 the drilling rig was set up on location SWMU 1-37. This was an additional deep boring installed southwest of boring SWMU1-2. The boring was completed using the HSA drilling method. Encountered at 8.5 - 9 feet bgl and 12 - 13 feet bgl were saturated clayey sands. The boring was terminated in a very dense, dry, gray, clay / mudstone (Petrified Forest Formation) 18 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 10 - 15 feet bgl. A groundwater sample was collected on October 11, 2012. The well was pulled and the borehole was grouted on October 11, 2012.

4.4.2 Old API Separator

SWMU 14-2 / OAPIS-1

On July 17, 2012 the drilling rig was set up on location SWMU 14-2. The boring was installed using the HSA drilling method. No damp or saturated intervals were encountered during drilling. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 15 - 25 feet bgl. Water slowly entered the temporary well screen and on July 19, 2012 a groundwater sample was collected from the well. The temporary PVC well was pulled on July 19, 2012.

A permanent well was subsequently installed at this location on July 19, 2012. In order to accommodate the screen placement, the borehole was advanced to a depth of 26 feet bgl. Slotted (0.01 inch) 2-inch rigid PVC well screen was placed at the bottom of the boring and extended for 10 feet (16.0 to 26.0 feet) to ensure that the entire saturated zone was open to the monitoring well. The 10/30 sand filter pack was installed to 2.0 feet over the top of the screen. As the sand was installed in the well bore the hollow stem augers were removed. Approximately 14 feet of bentonite was placed over the filter pack and hydrated. The surface completion consists of a stickup completion, which includes a protective PVC casing with cap that was secured in the concrete pad.

SWMU 14-3

On July 18, 2012 the drilling rig was set up on location SWMU 14-3. The boring was installed using the HSA drilling method. Groundwater was observed in the sampling spoon from the 14 - 16 feet bgl interval, while no particular zone of saturation was observed while drilling the boring. The boring was terminated at 26 feet bgl. A groundwater sample was collected from the augers and the borehole was grouted to the surface on the same day.

Section 5
Regulatory Criteria

The applicable screening and potential cleanup levels are specified in NMED's *Risk Assessment Guidance for Site Investigations and Remediation* dated February 2012, updated June 2012 and in the Environmental Protection Agency's (EPA) Regional Screening Levels dated November 2012.

For non-residential properties (e.g., the Gallup Refinery), the soil screening levels must be protective of construction workers throughout the upper ten feet based on NMED criteria. NMED residential soil screening levels are applied to the upper ten feet and soil screening levels for protection of groundwater apply throughout the vadose zone. EPA soil screening levels for direct contact exposure apply to the upper two feet of the vadose zone. To achieve closure as "corrective action complete without controls", the affected media must meet residential screening levels, which are presented in Table 4. Table 5 provides a list of the available NMED and EPA soil screening levels for non-residential properties. While Tables 4 and 5 indicate the various depths to which the individual soil screening levels are applicable, Tables 7 and 8 discussed below does not include this level of detail.

The groundwater cleanup levels are based on New Mexico Water Quality Control Commission (WQCC) standards (20.6.2.7 WW NMAC, 20.6.2.3103, and 20.6.2.4103) unless there is a federal maximum contaminant level (MCL), in which case the lower of the two values is selected as the cleanup level. If neither a WCQQ standard nor an MCL is available, then the cleanup level is based on a NMED Tap Water Screening Level. If a NMED Tap Water Screening Level is not available for a constituent, then an EPA Regional Screening Level is used. If an EPA Regional Screening Level is for a carcinogenic compound, then the screening level is multiplied by 10 to bring the risk level to 1E-05 to be consistent with the NMED screening levels. Table 6 presents the groundwater cleanup levels, with the applicable cleanup level highlighted.

The aforementioned Tables 4 and 5 have soil screening levels for the soil-to-groundwater pathway that are based on a dilution/attenuation factor (DAF) of 1.0 and 461. The soil screening level based on a DAF of 1.0 is a reference value only used to document the final calculation of site-specific soil screening levels. A review of site conditions indicates that a DAF of 1.0 is overly conservative, thus a site-specific DAF value was calculated. The documentation of the calculation of the site-specific DAF value is provided in Appendix C.

The screening levels that are compared to individual soil sample results from SWMU No. 1 (Aeration Basin) are presented in Table 7 and the soil samples results for SWMU No. 14 (OAPIS) are presented in Table 8. The screening levels included in Table 7 and 8 are based on residential and non-residential land use and include a screening level to evaluate the potential for constituents to migrate to groundwater using a site-specific DAF. For the non-residential screening levels, the construction worker scenario screening levels for each constituent is included in the data tables if NMED screening levels are available. If NMED soil screening levels are not available for a particular constituent, then EPA soils screening levels are used. If an EPA soil screening level is for a carcinogenic compound, then the screening level is multiplied by 10 to bring the risk level to 1E-05 to be consistent with the NMED screening levels. The screening levels in Tables 7 and 8 have not been segregated based on depth of the soil sample as discussed above for Tables 4 and 5. The screening levels that are compared to individual groundwater sample results from SWMU No. 1 (Aeration Basin) are presented in Table 9 and the groundwater samples results for SWMU No. 14 (OAPIS) are presented in Table 10. It should also be noted that the soil sample results for chromium are compared to the screening levels for both chromium III and VI, as speciation has not been conducted to determine if the detected chromium is chromium III or chromium VI.

A review of the NMED guidelines for TPH indicates that the TPH screening levels were developed based on screening levels and compositional assumptions developed by the Massachusetts Department of Environmental Protection (MADEP). The analytical results, as presented in Tables 7 and 8, are reported for gasoline range organics (C6-C10), diesel range organics (>C10-C28), and motor oil range organics (>C28-C35). The applicable TPH screening levels for comparison to the individual samples are selected from Table 6-2 of the NMED guidance.

There are no soil screening levels for gasoline range organics and the individual compounds listed for groundwater (gasoline range criteria) are included in the list of analytes used for site samples. As there could have been a variety of petroleum types (e.g., crude oil or various refined products) going to the OAPIS and Aeration Basin, the screening level for “unknown oil” was selected for comparison to the diesel and motor oil range soil analytical results.

Some of the individual constituents reported by the laboratory do not have screening levels but were all non-detect with respect to soil, except 4-isopropyltoluene, 4-nitrophenol, 3+4-methylphenol, and sec-butylbenzene. With respect to groundwater, there were also detections of constituents that do not have screening levels. The constituents detected in groundwater that do not have screening levels include, 4-isopropyltoluene, 3+4-methylphenol, 2-nitrophenol, 4-nitrophenol, sec-butylbenzene. None of these 10 constituents are classified as a carcinogen.

Section 6
Site Impacts

This section discusses the chemical analyses performed and presents the analytical results that were obtained through the analysis of soil and groundwater samples, which were collected at the Aeration Basin and OAPIS. The results for soils and groundwater analyses are presented and compared to applicable screening levels, as described in Section 5.0.

6.1 Soil Analytical Results

Soil samples were analyzed by Hall Environmental Analysis Laboratory in Albuquerque, New Mexico using the following methods for organic constituents:

- SW-846 Method 8260 volatile organic compounds;
- SW-846 Method 8270 semi-volatile organic compounds; and
- SW-846 Method 8015B gasoline, diesel, and motor oil range petroleum hydrocarbons.

Soil samples were analyzed for the following metals using the indicated analytical methods, respectively.

Analyte	Analytical Method
Antimony	SW-846 method 6010
Arsenic	SW-846 method 6010
Barium	SW-846 method 6010
Beryllium	SW-846 method 6010
Cadmium	SW-846 method 6010
Chromium	SW-846 method 6010
Cobalt	SW-846 method 6010
Cyanide	SW-846 method 335.3/335.2 mod
Iron	SW-846 method 6010
Lead	SW-846 method 6010
Mercury	SW-846 method 7470/7471
Manganese	SW-846 method 6010
Nickel	SW-846 method 6010
Selenium	SW-846 method 6010
Silver	SW-846 method 6010
Vanadium	SW-846 method 6010
Zinc	SW-846 method 6010

The analytical results for soil samples collected at the Aeration Basin are summarized in Table 7 and the results for soils collected at the OAPIS are summarized in Table 8. The individual results that exceed the applicable cleanup levels are highlighted, as noted in the table footnotes. Maps showing the distribution of constituents detected in soils above the lowest applicable screening levels are included as Figures 12 – 29. The concentrations shown on Figures 12 – 29 that exceed the screening levels in Tables 7 and 8 are underlined on the figures [i.e., concentrations above residential and/or DAF (461) screening levels]. The laboratory analytical reports are included in Appendix E and the data validation of the results, which includes the analytical results for the associated QA/QC samples, is included in Appendix F.

The constituents that have concentrations in soils above screening levels as measured in samples collected from within either the Aeration Basin or the OAPIS are discussed below. The results for the Aeration Basin are presented first, followed by the results for the OAPIS.

6.1.1 Aeration Basin Soil Results

1,2,4-Trimethlybenzene was detected in one sample [SWMU 1-1 (2-4')] at a concentration above the DAF screening level (9.68 mg/kg) but none of the results exceed the residential screening level (62 mg/kg). The detected concentrations range from 0.00104 mg/kg to 44 mg/kg and are shown on Figure 12.

1-Methylnaphthalene was detected in two soil samples [SWMU 1-1 (2 - 4') and SWMU 1-1 (10 - 12')] at concentrations above the DAF screening level of 2.35 mg/kg. The detected concentrations range from 0.0456 to 35 mg/kg and do not exceed either the residential or non-residential (i.e., construction worker) screening levels. The analytical results are shown on Figure 13.

Benzene was detected in two soil samples [SWMU 1-1 (2 - 4') and SWMU 1-28 (1.5 - 2.0')] at concentrations above the DAF screening level (0.796 mg/kg) but none of the results exceed the residential or non-residential soil screening levels. The detected concentrations range from 0.00109 mg/kg to 3.2 mg/kg and are presented on Figure 14.

Naphthalene was detected in one sample [SWMU 1-1 (2 - 4')] at a concentration of 13 mg/kg, which exceeds the DAF screening level of 1.64 mg/kg, but does not exceed the residential or non-residential screening levels. The naphthalene concentrations are shown on Figure 15.

Diesel Range Organics (DRO) was detected in one sample [SWMU 1-1 (2 - 4')] at a concentration of 4,700 mg/kg, which exceeds the screening level of 1,000 mg/kg. The detected results ranged from 12 to 4,700 mg/kg and are shown on Figure 16.

Arsenic was detected in three soil samples at concentrations above the residential soil screening level of 3.9 mg/kg. These reported concentrations of 4.6 mg/kg, 4.7 mg/kg and 4.9 mg/kg, which are all estimated values due to the values being less than the practical quantitation limit, occur in samples SWMU 1-16 (7.5-8.0'), SWMU 1-17 (0-0.5'), and SWMU 1-18 (0-0.5'), respectively.

6.1.2 Old API Separator Soil Results

1,1,2-Trichloroethane was detected in one sample [SWMU 14-17 (1.5 – 2')] at a concentration (1.0 mg/kg), which exceeds the DAF screening level (0.0514 mg/kg) but did not exceed the residential or non-residential screening levels. The 1,1,2-trichloroethane analytical results are shown on Figure 17.

1,2,4-Trimethlybenzene was detected in eight samples [SWMU 14-6 (10 - 12'), SWMU 14-7 (6 - 8'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-14 (0 - 0.5'), SWMU 14-15 (1.5 – 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 – 2.0')] at concentrations above the DAF screening level (9.68 mg/kg) but none exceed the residential or non-residential screening levels. The detected concentrations range from 0.000507 mg/kg to 44 mg/kg and are shown on Figure 18.

1,2-Dibromo-3-chloropropane was detected in three samples [SWMU 14-7 (0 - 0.5'), SWMU 14-7 (1.5 – 2.0'), and SWMU 14-12 (0 – 0.5')] at concentrations above the residential and DAF screening levels in one sample but only above the DAF screening level in two of the samples. The detected concentrations range from 0.000593 mg/kg to 2.2 mg/kg and are shown on Figure 19.

1,2-Dibromoethane (EDB) was detected in 18 samples [SWMU 14-2 (1.5 – 2.0'), SWMU 14-2 (8 - 10'), SWMU 14-3 (12 - 14'), SWMU 14-3 (8 - 10'), SWMU 14-4 (10 - 12'), SWMU 14-7 (0 - .5'), SWMU 14-7 (6 - 8'), SWMU 14-8 (1.5 -2.0'), SWMU 14-9 (4 - 6'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-13 (0 - 0.5'), SWMU 14-13 (1.5 – 2.0'), SWMU 14-14 (0 - 0.5'), SWMU 14-14 (1.5 – 2.0'), SWMU 14-16 (1.5 – 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 – 2.0')] at concentrations above the DAF screening level (0.0071 mg/kg)

with three sample results above the residential screening level. The detected concentrations range from 0.12 mg/kg to 1.2 mg/kg and are shown on Figure 20.

1,2-Dichloropropane was detected in two samples [SWMU 14-12 (0 – 0.5') and SWMU14-18 (1.5 – 2.0')] at concentrations above the DAF screening level (0.494 mg/kg) but none exceed the residential or non-residential screening levels. The detected concentrations range from 0.089 mg/kg to 0.82 mg/kg and are shown on Figure 21.

1-Methylnaphthalene was detected in 18 samples [SWMU 14-2 (1.5 – 2.0'), SWMU 14-2 (8 -10'), SWMU 14-3 (12 - 14'), SWMU 14-3 (8 - 10'), SWMU 14-4 (10 - 12'), SWMU 14-6 (10 - 12'), SWMU 14-7 (6 - 8'), SWMU 14-9 (4 - 6'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 - 2.0'), SWMU 14-13 (0 - 0.5'), SWMU 14-13 (1.5 – 2.0'), SWMU 14-14 (0 - 0.5'), SWMU 14-14 (1.5 - 2.0'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-16 (1.5 – 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 -2.0')] at concentrations above the DAF screening level (2.35 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.000458 mg/kg to 45 mg/kg and are shown on Figure 22.

2-Methylnaphthalene was detected in one sample [SWMU 14-4 (10 – 12')] at a concentration of 90.0 mg/kg, which exceeds the DAF screening level (64.5 mg/kg) but did not exceed the residential or non-residential screening levels. The 2-methylnaphthalene analytical results are shown on Figure 23.

Benzene was detected in nine samples [SWMU 14-6 (10 - 12'), SWMU 14-7 (6-8'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-14 (1.5 – 2.0'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-17 (1.5 – 2.0'), SWMU 14-18 (1.5 – 2.0'), and SWMU 14-23 (12 - 14')] at concentrations above the DAF screening level (0.796 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.00072 mg/kg to 5.9 mg/kg and are shown on Figure 24.

Ethylbenzene was detected in six samples [SWMU 14-6 (10 - 12'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 – 2.0')] at concentrations above the DAF screening level (5.98 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.000542 mg/kg to 23 mg/kg and are shown on Figure 25.

Naphthalene was detected in 14 samples [SWMU 14-2 (8 - 10'), SWMU 14-3 (12 - 14'), SWMU 14-3 (8 - 10'), SWMU 14-4 (10 - 12'), SWMU 14-6 (10 - 12'), SWMU 14-7 (6 - 8'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-13 (0 - 0.5'), SWMU 14-14 (0 - 0.5'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-16 (1.5 – 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 - 2.0')] at concentrations above the DAF screening level (1.64 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.000458 mg/kg to 17 mg/kg and are shown on Figure 26.

Xylenes were detected in two samples [SWMU 14-12 (0 - 0.5'), and SWMU 14-15 (1.5 - 2.0')] at concentrations above the DAF screening level (72.1 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.00282 mg/kg to120 mg/kg and are shown on Figure 27.

Bis(2-chloroethyl)ether was detected in two samples [SWMU 14-9 (4 - 6') and SWMU 14-15 (1.5 - 2.0')] at concentrations above the DAF screening level (0.0121 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.18 mg/kg to 0.43 mg/kg and are shown on Figure 28.

DRO was detected in 21 samples [SWMU 14-2 (1.5 – 2.0'), SWMU 14-2 (8 - 10'), SWMU 14-3 (8 - 10'), SWMU 14-6 (10 - 12'), SWMU 14-7 (0 - 0.5'), SWMU 14-7 (1.5 – 2.0'), SWMU 14-8 (1.5 – 2.0'), SWMU 14-9 (1.5 – 2.0'), SWMU 14-9 (4 - 6'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-13 (1.5 – 2.0'), SWMU 14-14 (0 - 0.5'), SWMU 14-14 (1.5 – 2.0'), SWMU 14-15 (0 - 0.5'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-16 (1.5 – 2'), SWMU 14-7 (0 - 0.5'), SWMU 14-17 (1.5 – 2.0'), SWMU 14-18 (0 - 0.5'), and SWMU 14-18 (1.5 – 2.0')] at concentrations above the screening level (1,000 mg/kg). The detected concentrations range from 19 mg/kg to 15,000 mg/kg and are shown on Figure 29.

Arsenic was detected in eight soil samples at concentrations ranging from 1.6 to 3.0 mg/kg. All of these results are less than the lowest screening level (residential) of 3.9 mg/kg. They are also estimated values as they were detected at concentrations less than the practical quantitation limit.

6.2 Groundwater Analytical Results

The groundwater samples were analyzed for organic constituents by the following methods:

- SW-846 Method 8260 volatile organic compounds;

- SW-846 Method 8270 semi-volatile organic compounds; and
- SW-846 Method 8015B gasoline, diesel, and motor oil range organics.

Groundwater samples were analyzed for the following metals using the indicated analytical methods.

Analyte	Analytical Method
Antimony	SW-846 method 200.8
Arsenic	SW-846 method 200.8
Barium	SW-846 method 200.7
Beryllium	SW-846 method 200.7
Cadmium	SW-846 method 200.7
Chromium	SW-846 method 200.7
Cobalt	SW-846 method 200.7
Cyanide	SW*--846 method 335.3/335.2 mod
Lead	SW-846 method 200.8
Mercury	SW-846 method 200.7
Nickel	SW-846 method 200.7
Selenium	SW-846 method 200.8
Silver	SW-846 method 200.7
Vanadium	SW-846 method 200.7
Zinc	SW-846 method 200.7

In addition, groundwater samples were analyzed for chloride, fluoride, and sulfate using EPA method 300.

The analytical results and the applicable cleanup levels are presented in Tables 9 and 10. The individual results that exceed the applicable cleanup levels are highlighted. Maps depicting the distribution of the various constituents detected in groundwater samples above the screening levels are provided in Figures 30 and 31. The concentrations shown on Figures 30 and 31 that exceed the screening levels are underlined on the figures. The results for the associated QA/QC samples and the data validation are provided in Appendix F. The laboratory analytical reports are included in Appendix E.

6.2.1 Aeration Basin Groundwater Results

All of the groundwater samples collected at the Aeration Basin were collected from temporary well completions and there are numerous metals detected at concentrations above their

respective screening levels. Arsenic was detected above the screening level of 0.01 mg/l in seven samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-4 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0082 mg/l to 0.063 mg/l and are shown on Figure 30.

Barium was detected above the screening level of 1.0 mg/l in six samples (SWMU 1-2 GW, SWMU 1-4 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.24 mg/l to 56 mg/l and are shown on Figure 30.

Beryllium was detected above the screening level of 0.004 mg/l in six samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0065 mg/l to 0.21 mg/l.

Chromium (total) was detected above the screening level of 0.05 mg/l in five samples (SWMU 1-2 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.015 mg/l to 0.31 mg/l.

Cobalt was detected above the screening level of 0.05 mg/l in five samples (SWMU 1-2 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.011 mg/l to 0.53 mg/l.

Iron (total) was detected above the screening level of 1.0 mg/l in seven samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, SWMU 1-24 GW, and SWMU 1-37 GW). The detected concentrations range from 0.32 mg/l to 160 mg/l.

Lead was detected above the screening level of 0.015 mg/l in six samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0041 mg/l to 1.7 mg/l and are shown on Figure 30.

Manganese was detected above the screening level of 0.2 mg/l in seven samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-4 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, SWMU 1-24 GW, and SWMU 1-37 GW). The detected concentrations range from 0.99 mg/l to 95 mg/l and are shown on Figure 30.

Nickel was detected above the screening level of 0.2 mg/l in six samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-24 GW, and SWMU 1-37 GW). The detected concentrations range from 0.11 mg/l to 0.95 mg/l and are shown on Figure 30.

Selenium was detected above the screening level of 0.05 mg/l in one sample (SWMU 1-2 GW). The detected concentrations range from 0.0072 mg/l to 0.059 mg/l.

Vanadium was detected above the screening level of 0.183 mg/l in one sample (SWMU 1-24 GW). Only the one sample had a detected concentration of 0.2 mg/l.

Fluoride was detected above the screening level of 1.6 mg/l in four samples (SWMU 1-2 GW, SWMU 1-4 GW, SWMU 1-6 GW, and SWMU 1-24 GW). The detected concentrations range from 0.78 mg/l to 13 mg/l.

1,2,4-Trimethylbenzene was detected above the screening level of 0.015 mg/l in one sample (SWMU 1-4 GW). The detected concentrations range from 0.0069 mg/l to 0.032 mg/l and are shown on Figure 31.

1-Methylnaphthalene was detected above the screening level of 0.0097 mg/l in three samples (SWMU 1-4 GW, SWMU 1-8 GW and SWMU 1-24). The detected concentrations range from 0.0098 mg/l to 0.011 mg/l and are shown on Figure 31.

Benzene was detected above the screening level of 0.005 mg/l in three samples (SWMU 1-2 GW, SWMU 1-4 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0011 mg/l to 0.024 mg/l and are shown on Figure 31.

Methyl tert-butyl ether (MTBE) was detected above the screening level of 0.125 mg/l in two samples (SWMU 1-8 GW and SWMU 1-37 GW). The detected concentrations range from 0.014 mg/l to 0.31 mg/l and are shown on Figure 31.

Naphthalene was detected above the screening level of 0.00143 mg/l in three samples (SWMU 1-4 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0023 mg/l to 0.032 mg/l and are shown on Figure 31.

2,4-Dimethylphenol was detected above the screening level of 0.73 mg/l in one sample (SWMU 1-4 GW). The detected concentrations range from 0.026 mg/l to 0.85 mg/l and are shown on Figure 31.

DRO was detected at elevated concentrations in four samples (SWMU 1-4 GW, SWMU 1-6 GW, SWMU 1-24 GW, and SWMU 1-37 GW). The detected concentrations range from 1.0 mg/l to 4.4 mg/l and the results are shown on Figure 31.

6.2.2 Old API Separator Groundwater Results

Two of the groundwater samples (SWMU 14-2 GW and SWMU 14-3 GW) were collected from temporary well completions and a third groundwater sample (SWMU 14-OAPIS-1 GW) was collected from a permanent well completion installed in soil boring SWMU 14-2. There are numerous metals detected at concentrations above their respective screening levels in the two groundwater samples collected from the temporary well completions, but only two metals above screening levels in the sample collected from the permanent well. Arsenic was detected above the screening level of 0.01 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.012 mg/l to 0.024 mg/l and are shown on Figure 30.

Barium was detected above the screening level of 1.0 mg/l in one sample (SWMU 14-3 GW). The detected concentrations range from 0.54 mg/l to 2.8 mg/l and are shown on Figure 30.

Beryllium was detected above the screening level of 0.004 mg/l in one sample (SWMU 14-3 GW). The detected concentrations range from 0.0021 mg/l to 0.042 mg/l.

Chromium (total) was detected above the screening level of 0.05 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.012 mg/l to 0.38 mg/l.

Cobalt was detected above the screening level of 0.05 mg/l in one sample (SWMU 14-3 GW). The detected concentrations range from 0.038 mg/l to 0.12 mg/l.

Cyanide was detected above the screening level of 0.2 mg/l in one sample (SWMU 14-2 GW). The detected concentrations range from 0.09 mg/l to 0.216 mg/l.

Iron was detected above the screening level of 1.0 mg/l in three samples (SWMU 14-2 GW, SWMU 14-3 GW, and SWMU 14-OAPIS-1 GW). The detected concentrations range from 5.6 mg/l to 120 mg/l.

Lead was detected above the screening level of 0.015 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.044 mg/l to 0.19 mg/l and are shown on Figure 30.

Manganese was detected above the screening level of 0.2 mg/l in three samples (SWMU 14-2 GW, SWMU 14-3 GW, and SWMU 14-OAPIS-1 GW). The detected concentrations range from 1.3 mg/l to 45 mg/l and are shown on Figure 30.

Vanadium was detected above the screening level of 0.183 mg/l in one sample (SWMU 14-3 GW). The detected concentrations range from 0.029 mg/l to 0.52 mg/l.

I,2,4-Trimethylbenzene was detected above the screening level of 0.015 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.082 mg/l to 0.085 mg/l and are shown on Figure 31.

1-Methylnaphthalene was detected above the screening level of 0.0097 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.061 mg/l to 0.17 mg/l and are shown on Figure 31.

2-Methylnaphthalene was detected above the screening level of 0.027 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.039 mg/l to 0.11 mg/l and are shown on Figure 31.

Benzene was detected above the screening level of 0.005 mg/l in three samples (SWMU 14-2 GW, SWMU 14-3 GW, and SWMU 14-OAPIS-1 GW). The detected concentrations range from 0.013 mg/l to 0.097 mg/l and are shown on Figure 31.

MTBE was detected above the screening level of 0.125 mg/l in three samples (SWMU 14-2 GW SWMU 14-3 GW, and SWMU 14-OAPIS-1 GW). The detected concentrations range from 0.25 mg/l to 0.44 mg/l and are shown on Figure 31.

Methylene chloride was detected above the screening level of 0.005 mg/l in one sample (SWMU 14-3 GW). It was detected in only the one sample at a concentration of 0.0075 mg/l.

Naphthalene was detected above the screening level of 0.00143 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.042 mg/l to 0.045 mg/l and are shown on Figure 31.

DRO was detected at elevated concentrations in two samples (SWMU 14-2 GW and SWMU 14-OAPIS-1 GW). The detected concentrations range from 6.5 mg/l to 83 mg/l and are shown on Figure 31.

6.3 General Groundwater Chemistry

The measurement of field purging parameters included measurement of groundwater pH, specific conductance, dissolved oxygen concentrations, oxidation-reduction potential, and

temperature. The results of the measurements are included in Table 11 and fluid levels measured prior to purging are presented in Table 2.

Section 7
Conclusions and Recommendations

This section summarizes and provides an evaluation of the potential impacts as shown in field screening data and analytical data. This is followed by recommendations for any future actions.

7.1 Conclusions

A cumulative risk evaluation for soils is presented in Tables 12 and 13 for SWMUs No. 1 and No. 14, respectively. As directed by NMED, the soil analytical results for sample SWMU 1-1 (2-4') has also been included in the SWMU 14 soil results due to its location near to SWMU 14. The evaluation was conducted by taking the maximum reported soil concentration of each detected constituent and dividing by the residential screening level and non-residential screening levels as shown in the equations below. These calculations are separated for carcinogenic and non-carcinogenic constituents. The cumulative carcinogenic risk is 1.36 x 10^{-3} assuming residential land use and 6.3 x 10^{-5} for non-residential land use at SWMU No. 1. The cumulative carcinogenic risk is 1.41 x 10^{-3} assuming residential land use and 6.93 x 10^{-5} for non-residential land use at SWMU No. 14. The hazard index for residential land use is 0.56 and for non-residential land use is 0.126 at SWMU No. 1. The hazard index for residential land use is 1.30 and for non-residential land use is 0.384 at SWMU No. 14.

$$Site\ Risk = \left(\frac{conc_x}{SSL_x} + \frac{conc_y}{SSL_y} + \frac{conc_z}{SSL_z} + \cdots + \frac{conc_i}{SSL_i}\right) \times 10^{-5}$$

$$Site\ Hazard\ Index\ (HI) = \left(\frac{conc_x}{SSL_x} + \frac{conc_y}{SSL_y} + \frac{conc_z}{SSL_z} + \cdots + \frac{conc_i}{SSL_i}\right) \times 1$$

A cumulative risk evaluation for groundwater is presented in Tables 14 and 15 for SWMUs No. 1 and No. 14, respectively. The evaluation was conducted by taking the maximum reported concentration of each constituent detected in groundwater, which is based on the totals analyses for metals, and dividing by the risk-based residential screening levels, as shown in the equation above in the discussion for soil. The cumulative carcinogenic risk level is calculated to be 1.74 x 10^{-3} for SWMU No. 1 and 1.48 x 10^{-3} for SWMU No. 14. The hazard index is 147.04 for SWMU 1 and 79.55 for SWMU 14.

7.1.1 Aeration Basin

Soils

Four organic constituents (1,2,4-trimethylbenzene, 1-methylnaphthalene, benzene, and naphthalene), and DRO were detected in three soil samples at concentrations exceeding their respective DAF soil screening levels. Two of the soil samples with constituents detected at concentrations above the DAF screening levels are found in soil boring SWMU 1-1, which is located on the southeastern boundary of the Aeration Basin. The sample intervals with concentrations above the DAF screening level include 2-4' and 10-12', with most exceedences in the 2-4' interval. The 2-4' interval is logged as fill material composed of silty clay and the deeper 10-12' interval is clay. This boring was terminated at 14 feet, after encountering bedrock at 13' bgl. There was no indication of saturated conditions in this boring; however, contaminants have migrated to this location immediately adjacent to the Aeration Basin. Similar constituents are found in soils investigated a short distance to the south, near the OAPIS (see Section 7.1.2 below).

Benzene was the only constituent detected above the DAF screening level in soil boring SWMU 1-28 at a depth of 1.5 – 2.0' bgl (2.53 mg/kg vs. 0.796 mg/kg). Soil boring SWMU 1-28 is located on the northern boundary of the Aeration Basin and the 1.5 – 2.0' interval is composed of a clayey gravelly sand, which was damp, but not saturated. The boring was terminated at 4 feet bgl in the same material. The PID readings were low and there was no odor throughout the boring. Boring SWMU 1-28 was originally scheduled as a hand auger location, but it was completed with the HSA drilling rig to allow penetration below 2 feet in order to assess potential impacts observed in the adjacent deep soil boring (SWMU 1-6). Boring SWMU 1-6 had an elevated PID reading of 37.5 ppm in the 2-4 interval; however, no constituents exceeded any of the soil screening levels in the soil samples collected from 2-4' or 4-6' intervals in boring SWMU 1-6.

Overall, there were few exceedences of the DAF screening levels in the soil samples collected around the Aeration Basin. Only 3 (SWMU 1-1 (2-4'), SWMU 1-1 (10-12'), and SWMU 1-28 (1.5-2') out of 103 soil samples collected around the Aeration Basin exceeded DAF screening levels. The vertical impacts to soil were found to extend to the uppermost groundwater-bearing horizons in some borings around the Aeration Basin as discussed below.

Groundwater

There are a seemingly large number of metals detected at concentrations above residential / tap water screening levels in groundwater samples collected from the soil borings that surround the Aeration Basin. The metal screening levels were exceeded in every soil boring from which a groundwater sample was collected. It is possible that these results are affected by high turbidity levels in the water samples collected from the temporary well completions installed in the soil borings.

Seven organic constituents (1-methylnaphthalene, 2-methylnaphthalene, 1,2,4-trimethlybenzene, benzene, MTBE, naphthalene, and 2,4-dimethylphenol), and DRO were detected in groundwater samples collected from soil borings at concentrations above screening levels. At least one organic constituent was found at concentrations above the screening levels in borings SWMU 1-2, SWMU 1-4, SWMU 1-6, SWMU 1-8, SWMU 1-24, and SWMU 1-37. Soil boring SWMU 1-1 was installed near the southeast corner of the Aeration Basin and encountered bedrock at a depth of 13 feet bgl, but groundwater was not present at this location.

Soil boring SWMU 1-2 was drilled along the southwest side of the Aeration Basin and encountered bedrock at a depth of 19.5 feet bgl. There were several saturated soil intervals encountered in this boring including clayey sand from 8 to 11 feet, 14 to16 feet, 17 to 17.25 feet, and 18.25 to18.5 feet bgl. Benzene was the only organic constituent detected at a concentration above the screening level in SWMU 1-2 (0.017 mg/l vs. 0.005 mg/l). Additional soil boring SWMU 1-37 was installed southwest of the Aeration Basin to delineate potential impacts observed when drilling soil boring SWMU 1-2. Benzene did decrease to below the screening level in the groundwater sample collected at SWMU 1-37, but MTBE increased to a concentration slightly over the screening level (0.13 mg/l vs. 0.125 mg/l) and DRO was detected at 1.0 mg/l, which exceeds the screening level of 0.2 mg/l. In boring SWMU 1-37, bedrock was encountered at 16 feet bgl and two intervals of saturated clayey sand were present at 8.5 - 9 feet and 12 - 13 feet bgl.

Moving further around the edge of the Aeration Basin to just north of the southwest corner, SWMU 1-3 was drilled to bedrock at a depth of 19.5 feet bgl. A thin clayey sand zone at 11-11.25 feet and a second at 18-19.5 feet were both saturated in boring SWMU 1-3. None of the organic constituents exceeded their screening levels at SWMU 1-3. The stratigraphic relationship between the clayey sand zones appearing in SWMU 1-2, SWMU 1-3, SWMU 1-24, and SWMU 1-5 appear on cross section C-C’ (Figure 8).

The next deep soil boring drilled (SWMU 1-4) is located further north, on the west side of the Aeration Basin. This boring encountered bedrock at a depth of 23 feet bgl and had saturated intervals of clayey sand at 10-12 feet and clayey sand/sandy clay at 17-20 feet bgl. Six organic constituents (benzene, 2,4-dimethylphenol, 1-methylnaphthalene, 2-methylnaphthalene, 1,2,4-trimethylbenzene, and naphthalene) and DRO were found at concentrations in groundwater above their screening levels. Based on the field indication of impacts at SWMU 1-4, an additional soil boring (SWMU 1-24) was completed between SWMU 1-4 and SWMU 1-5. SWMU 1-24 was drilled to a depth of 34 feet, but bedrock was not encountered. A saturated interval of clayey silt/sand was identified from 24 to 28 feet bgl. A groundwater sample collected from this boring found benzene, 1-methylnaphthalene, DRO, and naphthalene at concentrations above their screening levels.

Based on the field evidence of potential impacts at borings SWMU 1-4 and SWMU 1-24, two additional soil borings (SWMU 1-20 and SWMU 1-38) were drilled west of the Aeration Basin. At location SWMU 1-20 (located southwest of SWMU 1-4), bedrock was encountered at a depth of only 10 feet bgl and there was no indication of saturation in the boring or the clayey sand deposits, which were identified in SWMU 1-4. No groundwater sample was collected at SWMU 1-20 as the boring was dry. Soil boring SWMU 1-38 was drilled west-northwest of SWMU 1-4 and bedrock was encountered at a depth of only 6 feet bgl. Once again, the clayey sand deposits, which were saturated in boring SWMU 1-4, were not present at this location to the west of the Aeration Basin. No groundwater sample was collected at SWMU 1-38 because the boring was dry. Based on the results of borings SWMU 1-20 and SWMU 1-38, it does not appear that the saturated zones found in SWMU 1-4 and SWMU 1-24 extend beyond the base of the slope on the west side of the Aeration Basin where borings SWMU 1-20 and SWMU 1-38 were completed.

Soil boring SWMU 1-5 was drilled on the northwest corner of the Aeration Basin where bedrock was encountered at a depth of 27 feet bgl. A thin layer of saturated clayey sand (26 - 27’ bgl) was identified on top of the bedrock. The temporary well completion produced very little water and no organic constituents were detected above their screening levels.

Soil boring SWMU 1-6 was drilled along the northern edge of the Aeration Basin and bedrock was found at a depth of 11 feet bgl. Two saturated clayey sand zones were identified at 4 - 6 feet and 10 - 11 feet bgl. DRO was the only organic analysis to exceed the screening level.

On the east side of the Aeration Basin, approximately 150 feet south of the northern most extent of the Aeration Basin, soil boring SWMU 1-7 was drilled to a depth of 18 feet bgl. Bedrock was encountered at 16 feet bgl. The only indication of saturation was in thin sand seams in the clay that immediately overlies the bedrock. No organic constituents were found to exceed their screening levels in the groundwater sample collected at SWMU 1-7.

Soil boring SWMU 1-8 was completed on the east side of the Aeration Basin near the New API Separator. Bedrock was encountered at depth of 19 feet bgl and there was one relatively thick saturated interval of clayey sand found on top of the bedrock from a depth of approximately 13 feet to 19 feet bgl. 1-Methlynaphthalene, MTBE and naphthalene were found in the groundwater sample collected from this boring at concentrations above their screening levels; however, there are additional monitoring wells in this area (e.g., NAPIS-1 located east of the new API Separator) that can be used to provide delineation to the east.

While there are detections of seven organic constituents and DRO in groundwater samples collected immediately surrounding the Aeration Basin, the concentrations are not significantly above the screening levels (i.e., generally less than one order of magnitude above the screening level). The saturated intervals in most locations consist of clayey sand, which was found to not be very productive during sample collection activities. The clayey sand intervals do not appear to be laterally continuous at most locations based on the inability to correlate zones between most of the soil borings completed around the perimeter of the Aeration Basin. It also appears that the source of recharge to the saturated intervals found in the borings around the Aeration Basin is the wastewater, which has been maintained in the Aeration Basin. As the Aeration Basin is removed from service and the liquids are removed, it is probable that the saturation observed in borings SWMU 1-2, SWMU 1-3, SWMU 1-4, SWMU 1-5, SWMU 1-6, SWMU 1-7, SWMU 1-8, SWMU 1-24, and SWMU 1-37 will dissipate.

7.1.2 Old API Separator

<u>Soils</u>

Twelve organic constituents [1,1,2-Trichloroethane, 1,2,4-trimethylbenzene, 1,2-dibromo-3-chloropropane, 1,2-dibromoethane (EDB), 1,2-dichloropropane, 1-methylnaphthalene, 2-methylnaphthalene, benzene, ethylbenzene, naphthalene, xylenes, and bis(2-chloroethyl)ether] and DRO were detected in soils at concentrations above their DAF screening levels. Two constituents (1,2-dibromo-3-chloropropane and 1,2-dibromomethane) had concentrations above

the residential soil screening levels, but below the non-residential screening levels. The highest concentrations were found in soil samples collected directly beneath the former location of the OAPIS at borings SWMU 14-12, SWMU 14-13, and SWMU 14-14, and at borings immediately adjacent to the OAPIS (e.g., SWMU 14-15, SWMU 14-16, and SWMU 14 -17). In addition, there is an area of elevated concentrations at depths of 8 to 12 feet bgl located near the west end of the former OAPIS, near borings SWMU 14-6 and SWMU 14-7, and extending north towards the location of the former benzene strippers.

Concentrations of these organic constituents decrease away from the OAPIS and the lateral extent of the impacts to soil were delineated to the south in soil borings SWMU 14-21 and SWMU 14-22. All constituents except benzene were found below their respective DAF screening levels to the east of the OAPIS in boring SWMU 1-23. Benzene was detected at 1.1 mg/kg vs. a DAF screening level of 0.796 mg/kg in silty clay at a depth of 12 – 14 feet in SWMU 14-23. All constituents were found at concentrations below their screening levels in the western most soil boring (SWMU 14-1), which was drilled to a depth of 50 feet in an attempt to hit bedrock or saturation. The extent of impacts to soil was not defined to the north toward the Aeration Basin, as demonstrated by impacts found in soil boring SWMU 14-3, which is located approximately half way between the former OAPIS and the Aeration Basin. It is possible that the impacts to soil may extend continuously between the OAPIS and the Aeration Basin, which are separated by only a short distance of approximately 60 feet. The vertical impacts to soil were found to extend to the uppermost groundwater-bearing horizons in borings SWMU 14-2 and SWMU 14-3.

Groundwater

Groundwater samples were collected from temporary well completions in two soil borings (SWMU 14-2 and SWMU 14-3) and one permanent monitoring well (OAPIS-1), which was installed in boring SWMU 14-2. Similarly as observed above for the temporary well completions around the Aeration Basin, many metals were detected above residential / tap water screening levels in the groundwater samples collected at the temporary well. The number of metals detected at concentrations above their screening levels in the groundwater sample collected from the permanent well completion (OAPIS-1) was significantly less than the number detected in the groundwater sample collected from the initial temporary well completion in this same soil boring (SWMU 14-2). It is possible that these results are affected by high turbidity levels in the water samples collected from the temporary well completions.

Seven organic constituents (benzene, 1-methlynaphthalene, 2-methylnaphthalene, 1,2,4-trimethlybenzene, Methylene chloride, MTBE, and naphthalene) and DRO were detected at concentrations above their screening levels in groundwater samples collected from both locations [SMWU 14-2 (OAPIS-1) and SMWU 14-3). Soil boring SWMU 14-2 was drilled to a depth of 26 feet, but did not encounter bedrock, nor was there any distinct saturated interval logged in this boring. Soil boring SWMU 14-3 was also drilled to a depth of 26 feet and did not encounter bedrock. An indication of potential saturation was observed near the top of a clay horizon in SWMU 14-3 at 14 feet bgl. Groundwater production was very slow from both of these locations, indicating the lack of a true aquifer.

The lateral extent of potential impacts to groundwater was defined by a series of dry soil borings drilled to the west, south and east of the OAPIS. SWMU 14-1, the western most soil boring near the OAPIS was drilled to a depth of 50 feet and never did encounter bedrock. There was no indication of saturation in SWMU 14-1 and the boring failed to produce any water. Two borings (SWMU 14-21 and SWMU 14-22) were drilled south of the OAPIS and no elevated PID readings or indication of saturation was logged in either boring. Soil boring SWMU 14-23 was drilled east of the OAPIS and did encounter a sandy clay zone at 16 feet bgl that was wet, but a temporary well completion in the boring failed to produce any water.

7.2 Recommendations

An additional soil boring to the north of the Aeration Basin near soil boring SWMU 1-6 could be completed to provide full delineation of both soil and groundwater impacts to the north of the Aeration Basin. Also an additional boring to the southwest of location SWMU 1-37 could provide additional control in this area for potential groundwater impacts. The area between the OAPIS and the Aeration Basin is relatively small and does not warrant additional investigation to determine if there is possible separation of impacts sourced from the two different SWMUs.

An additional soil boring could be installed east of the OAPIS near SWMU 1-23 to provide full delineation of soil impacts observed in this area. Additional soil data to the southwest of SWMU 14-6 could be used to better define soil impacts observed in this area of the site.

Section 8
References

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Tables

TABLE 1

Western Refining - Gallup Refinery - Historical Groundwater Analyses

Bold and highlighted values represent values above the applicable standards.		BTEX Parameters					Metals Parameters									
		Benzene (mg/L)	**Toluene (mg/L)**	**Ethyl Benzene (mg/L)**	**Total Xylenes (mg/L)**	**MTBE (mg/L)**	**Arsenic (mg/L)**	**Barium (mg/L)**	**Cadmium (mg/L)**	**Calcium (mg/L)**	**Cadmium (mg/L)**	**Chromium (mg/L)**	**Copper (mg/L)**	**Iron (mg/L)**	**Lead (mg/L)**	**Magnesium (mg/L)**
WQCC 20NMAC 6.2.3103 (Oct 2006)		**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**0.1**	**1.0**	**0.01**	**NE**		**0.05**	**1.0**	**1.0**	**0.05**	**NE**
40 CFR 141.62 MCL (May 2009)		**0.005**	**1**	**0.7**	**10**	**NE**	**0.01**	**2.0**	**0.005**	**NE**		**0.1**	**1.3**	**NE**	**0.015**	**NE**
EPA RSL for Tap Water (Nov 2012)		**0.00041**	**0.86**	**0.0013**	**0.19**	**0.012**	**0.000045**	**2.9**		**NE**		**NE**	**0.62**	**11**	**NE**	**NE**
Well ID	**DATE SAMPLED**															
GWM-1																
	10/26/2006						**0.077**	0.53	<0.002	380		<0.006	NL	NL	NL	93
	10/27/2006	**0.012**	<0.001	>0.001	<0.003	**0.16**										
	5/24/2007	**0.016**	<0.001	<0.001	<0.003	**0.23**	**0.081**	0.44	<0.002	360		<0.006	NL	NL	<0.005	87
	7/10/2008	**0.011**	0.0021	**0.0039**	0.019	**0.12**	**0.07**	0.45	<0.002	350		<0.006	0.014	**14**	0.01	81
	7/27/2009	**0.0089**	0.002	**0.0074**	0.034	**0.085**	**0.114**	0.53	<0.002	310		<0.006	<0.006	**14**	0.0072	78
	3/3/2010*	**0.012**	0.005	**0.011**	0.05	**0.078**	**0.098**	0.42	<0.002	280		<0.006	0.0072	**15**	0.0078	57
	7/20/2010	**0.008**	0.002	**0.0068**	0.03	**0.077**	**0.16**	**1.2**	<0.002	310		<0.006	0.019	**20**	0.011	70
	9/16/2010	**0.0075**	0.0049	**0.0067**	0.03	**0.053**	**0.12**	0.87	<0.002	310		<0.006	0.0098	**15**	0.012	76
	11/2/2010	**0.0069**	0.0023	**0.0035**	0.022	**0.062**	**0.14**	**1.4**	<0.002	310		<0.006	<0.006	**7.9**	0.0095	75
	2/16/2011	**0.0095**	0.0034	**0.0054**	0.023	**0.057**	**0.16**	0.94	<0.002	310		0.0089	0.0089	17	0.0098	71
	6/15/2011	**0.0074**	0.0027	**0.0053**	0.026	**0.047**	**0.14**	**1.5**	<0.002	270		<0.006	<0.006	17	0.01	65
	9/26/2011	**0.0096**	0.0052	**0.0059**	0.03	**0.051**	0.12	1.5		290		<0.006	<0.006	17	<0.005	67
	12/14/2011	**0.0085**	0.0019	**0.0042**	0.014	**0.054**										
	12/17/2011						**0.097**	0.67		<10		<0.006	0.029	**15**	**0.023**	2.5
	3/20/2012	**0.0057**	<0.001	**0.0019**	0.007	**0.054**	**0.073**	**1.1**			<0.002	<0.006	<0.006	**8.9**	**0.0058**	2.5
GWM-2																
	9/6/2010									430						76
	9/16/2010	<0.001	<0.001	<0.001	<0.003	0.011										
	10/4/2010	<0.001	<0.001	<0.001	<0.003	0.011				420						77
	2/16/2011	<0.001	<0.001	<0.001	<0.0015	0.0083				460						74
	6/15/2011	<0.001	<0.001	<0.001	<0.0015	0.003				570						120
	9/26/2011	<0.001	<0.001	<0.001	<0.0015	0.0026				620						110
	12/14/2011	<0.001	<0.001	<0.001	<0.001	0.0027				620						120
	3/20/2012	<0.005	<0.005	<0.005	<0.001	<0.012										
GWM-3																
	9/16/2010	<0.001	<0.001	<0.001	<0.003	0.009				540						120
	10/4/2010	<0.001	<0.001	<0.001	<0.003	0.0092				450						89
	2/16/2011	<0.001	<0.001	<0.001	<0.0015	0.0081				450						81
	6/15/2011	<0.001	<0.001	<0.001	<0.0015	0.002				470						83
	9/26/2011	<0.001	<0.001	<0.001	<0.002	<0.0025				500						91
	12/14/2011	<0.001	<0.01	<0.001	<0.002	<0.0025				440						79
	3/20/2012	<0.005	<0.005	<0.005	<0.001	<0.012										

TABLE 1

Western Refining - Gallup Refinery - Historical Groundwater Analyses

Bold and highlighted values represent values above the applicable standards.		Metals Parameters (cont.)									8260b Parameters						
		Manganese (mg/L)	**Selenium (mg/L)**	**Potassium (mg/L)**	**Silver (mg/L)**	**Sodium (mg/L)**	**Silver (mg/L)**	**Mercury (mg/L)**	**Uranium (mg/L)**	**Zinc (mg/L)**	**1,2,4-Trimethyl benzene (mg/L)**	**1,3,5-Trimethyl benzene (mg/L)**	**Naphthalene (mg/L)**	**1-Methyl naphthalene (mg/L)**	**2-Methyl naphthalene (mg/L)**	**Acetone (mg/L)**	**Isopropyl benzene (mg/L)**
WQCC 20NMAC 6.2.3103 (Oct 2006)			**0.05**	**NE**	**0.05**	**NE**		**0.002**	**0.03**	**10**	**NE**	**NE**	**0.03**	**NE**	**NE**	**NE**	**NE**
40 CFR 141.62 MCL (May 2009)			**0.05**	**NE**	**NE**	**NE**		**0.002**	**0.03**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (Nov 2012)			**0.078**	**NE**		**NE**		**0.00063**	**0.047**	**4.7**	**0.015**	**0.087**	**0.00014**	**0.00097**	**0.027**	**12**	**NE**
Well ID	**DATE SAMPLED**																
GWM-1																	
	10/26/2006		NL	4.2		1400		<0.0002	NL	NL							
	10/27/2006																
	5/24/2007		<0.05	3.7	<0.005	1300		<0.0002	NL	NL	<0.01	<0.01	<0.02	<0.04	<0.04	<0.1	<0.01
	7/10/2008		<0.05	3.3	<0.005	1400		<0.0002	NL	<0.05	0.0046	<0.002	<0.002	<0.008	<0.008	<0.02	<0.002
	7/27/2009		NL	3.0	<0.005	1300		<0.0002	0.0159	0.025	0.0064	0.0011	**0.0024**	**0.0097**	<0.004	<0.01	0.0026
	3/3/2010*		<0.05	2.9	<0.005	1200		<0.0002	0.0224	0.03	0.0081	<0.005	<0.01	<0.02	<0.02	<0.05	<0.005
	7/20/2010		<0.05	3.1	<0.005	1200		<0.0002	0.011	0.031	0.013	<0.001	**0.0035**	**0.0072**	<0.004	0.012	0.0016
	9/16/2010		<0.05	2.8	<0.005	1200		<0.0002	0.015	0.023	0.012	0.0019	NA	NA	NA	NA	NA
	11/2/2010		<0.05	2.9	<0.005	1100		<0.0002	0.009	0.025	0.0075	<0.001	<0.02	**0.011**	<0.004	<0.01	<0.001
	2/16/2011		0.02	4.3	<0.005	1200		<0.002	0.015	0.038	0.008	<0.001	<0.002	**0.01**	<0.004	<0.01	0.0014
	6/15/2011		0.015	<5.0	<0.005	1000		<0.0002	0.0084	0.026	**0.018**	0.0031	**0.0055**	**0.024**	0.0062	<0.01	0.0018
	9/26/2011		0.0082	3.2		1100		<0.0002	0.007	0.025	**0.019**	0.0029	**0.0044**	**0.028**	<0.004	<0.01	0.0019
	12/14/2011										0.004	<0.001	<0.002	**0.0052**	<0.004	<0.01	0.0013
	12/17/2011		0.0047	4.0		1100		<0.002	0.02	0.041							
	3/20/2012	0.0058	0.01				<0.005	<0.001	0.0069	0.016	0.0018	<0.001	<0.002	<0.004	<0.004	0.011	<0.001
GWM-2																	
	9/6/2010			3.2		950											
	9/16/2010																
	10/4/2010			3.0		910											
	2/16/2011			3.7		1000											
	6/15/2011			4.2		1600											
	9/26/2011			4.2		1600											
	12/14/2011			4.1		1500											
	3/20/2012																
GWM-3																	
	9/16/2010			8.2		1400											
	10/4/2010			7.6		1300											
	2/16/2011			7.9		1200											
	6/15/2011			5.7		1200											
	9/26/2011			5.1		1300											
	12/14/2011			4.6		1300											
	3/20/2012																

TABLE 1

Western Refining - Gallup Refinery - Historical Groundwater Analyses

Bold and highlighted values represent values above the applicable standards.		8260b Parameters (cont.)			General Chemical Parameters										
		n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	2,4-Dimethyl phenol (mg/L)	Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µmhos/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103 (Oct 2006)		**NE**	**NE**	**NE**	**1.6**	**250.0**	**NE**	**NE**	**10**	**NE**	**600.0**	**6 to 9**	**NE**	**0.2[1]**	**NE**
40 CFR 141.62 MCL (May 2009)		**NE**	**NE**	**NE**	**4.0**	**NE**	**NE**	**1**	**10**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (Nov 2012)		**0.78**	**NE**	**0.27**	**NE**	**NE**	**NE**	**1.6**	**25**	**0.00031**	**NE**	**NE**	**NE**	**NE**	**NE**
Well ID	**DATE SAMPLED**														
GWM-1															
	10/26/2006				**2.0**	**3700**	NL	<2.0	<2.0	<2.5	120	6.87	NR	NR	NR
	10/27/2006														
	5/24/2007	<0.01	<0.01	<0.01	**1.9**	**1800**	NL	<2.0	<2.0	<0.5	120	NL	NL	NL	NL
	7/10/2008	<0.002	<0.002	0.028	**1.7**	**1800**	NL	<2.0	<2.0	<0.5	110	6.92	7400	NR	NR
	7/27/2009	<0.001	0.0002	0.064	**2.1**	**1600**	NL	<4.0	<4.0	<0.5	73	7.03	6200	NR	NR
	3/3/2010*	<0.005	<0.005	NL	**2.1**	**1600**	2.7	<4.0	<4.0	<0.5	88	NR	NR	**3.9**	0.88
	7/20/2010	0.0019	0.0015	0.052	**2.9**	**1500**	2.6	<4.0	<4.0	<2.5	57	7.18	6400	NR	NR
	9/16/2010	NA	NA	NA	**2.9**	**1400**	NL	<4.0	<4.0	<5.0	48	NR	NR	**7.7**	0.71
	11/2/2010	0.0016	0.0012	NL	**3.5**	**1300**	NL	<1.0	<1.0	<5.0	26	NR	NR	**6.0**	0.68
	2/16/2011	<0.001	0.0018	NL	**2.8**	**1400**	2.5	**2.1**	2.1	<0.5	47	NR	NR	**5.4**	0.7
	6/15/2011	<0.01	0.0028	NL	**2.6**	**1200**	2.6	<2.0	<2.0	<2.5	64	NR	NR	**4.0**	0.53
	9/26/2011	<0.01	0.0027	NL	**3.5**	**1300**	1.5	<4.0	<4.0	<2.5	47	NR	NR	**3.9**	0.65
	12/14/2011	<0.001	0.0022	NL	1.2	**1300**	2.5	<1.0	<1.0	<10	54	NR	NR	**2.9**	0.81
	12/17/2011														
	3/20/2012	<0.001	0.0011	NL	3.6	**1200**	3.2	<0.5	<0.5	<2.5	130	NR	NR	**3.5**	1
GWM-2															
	9/6/2010														
	9/16/2010				0.46	**1400**	NL	<4.0	<4.0	<5.0	**700**	NR	NR	<1.0	<0.05
	10/4/2010				0.52	**1800**	3.4	<4.0	<4.0	<0.5	**740**	NR	NR	<1.0	<0.05
	2/16/2011				0.43	**910**	3.3	**2.6**	2.6	<0.5	**660**	NR	NR	<1.0	<0.05
	6/15/2011				**3.1**	**2200**	4.9	**66**	**66**	<2.5	**1100**	NR	NR	<1.0	<0.05
	9/26/2011				**16**	**2200**	4.9	**52**	**52**	<2.5	**1200**	NR	NR	<1.0	<0.05
	12/14/2011				0.48	**2100**	4	**25**	**25**	<10	**1000**	NR	NR	<1.0	<0.05
	3/20/2012				**3.6**	**1500**	4.4	<0.5	<0.5	<2.5	**1300**	NR	NR	2.4	<0.25
GWM-3															
	9/16/2010				**4.7**	**2000**	NL	**66**	**66**	<5.0	**1500**	NR	NR	**3.7**	0.066
	10/4/2010				**5.9**	**1800**	2.3	**61**	**61**	<0.5	**1500**	NR	NR	**1.3**	0.12
	2/16/2011				**4.2**	**1100**	2.1	**61**	**61**	<0.5	**1900**	NR	NR	<1.0	<0.05
	6/15/2011				**5.5**	**610**	2.3	<2.0	<2.0	<2.5	**1900**	NR	NR	**1.1**	0.12
	9/26/2011				**5.3**	**1000**	2.5	**130**	**130**	<2.5	**2500**	NR	NR	**2.7**	<0.05
	12/14/2011				**5.0**	**1400**	2.5	**51**	**51**	<10	**1800**	NR	NR	**1.3**	<0.05
	3/20/2012				**4.9**	**1300**	2.8	<0.5	<0.5	<2.5	**1600**	NR	NR	**2.7**	<0.25

9/26/2011 Quarterly sampling combined with Annual sampling event

DEFINITIONS:

NE = Not Established
NA = Not Analyzed
NL = Not Listed on laboratory analysis

STANDARDS:

WQCC 20 NMAC 6.23103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limites for Inorganic Contaminatnts
[1] NMED Table 6-2. TPH Screening Guidelines for Potable Ground Water (GW-1) (June 2012)

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure-ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water [1]	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
GWM-1	2/18/2008	6,910.22	6,912.61	26.20	19.91	6,892.70	17.5 - 23.5
	5/21/2008	6,910.22	6,912.61		19.47	6,893.14	
	9/10/2008	6,910.22	6,912.61		20.24	6,892.37	
	11/3/2008	6,910.22	6,912.61		20.55	6,892.06	
	2/11/2009	6,910.22	6,912.61		19.81	6,892.80	
	5/4/2009	6,910.22	6,912.61		19.56	6,893.05	
	8/10/2009	6,910.22	6,912.61		20.32	6,892.29	
	10/27/2009	6,910.22	6,912.61		20.57	6,892.04	
	3/3/2010	6,910.22	6,912.61		19.81	6,892.80	
	6/3/2010	6,910.22	6,912.61		18.14	6,894.47	
	9/16/2010	6,910.22	6,912.61		17.90	6,894.71	
	11/2/2010	6,910.22	6,912.61		18.41	6,894.20	
	2/16/2011	6,910.22	6,912.61		15.99	6,896.62	
	6/15/2011	6,910.22	6,912.61		15.82	6,896.79	
	9/26/2011	6,910.22	6,912.61		16.42	6,896.19	
	12/14/2011	6,910.22	6,912.61		16.08	6,896.53	
	6/12/2012	6,910.22	6,912.61		15.56	6,897.05	
	8/21/2012	6,910.22	6,912.61		16.29	6,896.32	
	11/28/2012	6,910.22	6,912.61		14.50	6,898.11	
	3/18/2013	6,910.22	6,912.61		16.87	6,895.74	
	6/12/2013	6,910.22	6,912.61		17.45	6,895.16	
	9/3/2013	6,910.22	6,912.61		17.88	6,894.73	
	11/11/2013	6,910.22	6,912.61		18.41	6,894.20	
	3/11/2014	6,910.22	6,912.61		18.92	6,893.69	
	6/5/2014	6,910.22	6,912.61		19.1	6,893.51	
	9/12/2014	6,910.22	6,912.61		19.56	6,893.05	
	11/11/2014	6,910.22	6,912.61		20.08	6,892.53	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure-ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water [1]	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
GWM-2	2/18/2008	6,910.32	6,913.09	18.81	18.45	6,894.64	3.2 - 16.2
	3/17/2008	6,910.32	6,913.09		DRY	DRY	
	5/21/2008	6,910.32	6,913.09		DRY	DRY	
	9/10/2008	6,910.32	6,913.09		DRY	DRY	
	11/3/2008	6,910.32	6,913.09		DRY	DRY	
	2/11/2009	6,910.32	6,913.09		DRY	DRY	
	5/4/2009	6,910.32	6,913.09		DRY	DRY	
	8/10/2009	6,910.32	6,913.09		DRY	DRY	
	10/27/2009	6,910.32	6,913.09		DRY	DRY	
	3/3/2010	6,910.32	6,913.09		DRY	DRY	
	6/3/2010	6,910.32	6,913.09		17.57	6,895.52	
	9/16/2010	6,910.32	6,913.09		17.30	6,895.79	
	11/2/2010	6,910.32	6,913.09		18.87	6,894.22	
	2/16/2011	6,910.32	6,913.09		15.08	6,898.01	
	6/15/2011	6,910.32	6,913.09		15.02	6,898.07	
	9/26/2011	6,910.32	6,913.09		15.89	6,897.20	
	12/14/2011	6,910.32	6,913.09		15.40	6,897.69	
	6/12/2012	6,910.32	6,913.09		14.96	6,898.13	
	8/21/2012	6,910.32	6,913.09		15.79	6,897.30	
	11/28/2012	6,910.32	6,913.09		13.83	6,899.26	
	3/18/2013	6,910.32	6,913.09		16.77	6,896.32	
	6/12/2013	6,910.32	6,913.09		17.10	6,895.99	
	9/3/2013	6,910.32	6,913.09		17.88	6,895.21	
	11/11/2013	6,910.32	6,913.09		18.39	6,894.70	
	3/11/2014	6,910.32	6,913.09		DRY	DRY	
	6/5/2014	6,910.32	6,913.09		DRY	DRY	
	9/12/2014	6,910.32	6,913.09		DRY	DRY	
	11/11/2014	6,910.32	6,913.09		DRY	DRY	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure-ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water (1)	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
GWM-3	2/18/2008	6,907.35	6,910.25	17.80	DRY	DRY	3 - 15
	5/21/2008	6,907.35	6,910.25		DRY	DRY	
	9/10/2008	6,907.35	6,910.25		DRY	DRY	
	11/3/2008	6,907.35	6,910.25		DRY	DRY	
	2/11/2009	6,907.35	6,910.25		DRY	DRY	
	5/4/2009	6,907.35	6,910.25		DRY	DRY	
	8/10/2009	6,907.35	6,910.25		DRY	DRY	
	10/27/2009	6,907.35	6,910.25		DRY	DRY	
	3/3/2010	6,907.35	6,910.25		DRY	DRY	
	6/3/2010	6,907.35	6,910.25		17.17	6,893.08	
	9/16/2010	6,907.35	6,910.25		16.92	6,893.33	
	11/2/2010	6,907.35	6,910.25		17.83	6,892.42	
	2/16/2011	6,907.35	6,910.25		12.84	6,897.41	
	6/15/2011	6,907.35	6,910.25		14.20	6,896.05	
	9/26/2011	6,907.35	6,910.25		15.64	6,894.61	
	12/14/2011	6,907.35	6,910.25		14.35	6,895.90	
	6/12/2012	6,907.35	6,910.25		14.70	6,895.55	
	8/21/2012	6,907.35	6,910.25		15.45	6,894.80	
	11/28/2012	6,907.35	6,910.25		13.60	6,896.65	
	3/18/2013	6,907.35	6,910.25		DRY	DRY	
	6/12/2013	6,907.35	6,910.25		DRY	DRY	
	9/3/2013	6,907.35	6,910.25		DRY	DRY	
	11/11/2013	6,907.35	6,910.25		DRY	DRY	
	3/11/2014	6,907.35	6,910.25		DRY	DRY	
	6/5/2014	6,907.35	6,910.25		DRY	DRY	
	9/12/2014	6,907.35	6,910.25		DRY	DRY	
	11/11/2014	6,907.35	6,910.25		DRY	DRY	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure-ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water [1]	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
NAPIS 1 (KA-1R)	4/11/2008	6,913.62	6,913.86	13.53	8.58	6,905.28	3.7 -13.7
	7/11/2008	6,913.62	6,913.86		8.98	6,904.88	
	11/4/2008	6,913.62	6,913.86		8.83	6,905.03	
	3/23/2009	6,913.62	6,913.86		8.92	6,904.94	
	5/28/2009	6,913.62	6,913.86		8.67	6,905.19	
	8/11/2009	6,913.62	6,913.86		9.06	6,904.80	
	11/23/2009	6,913.62	6,913.86		10.28	6,903.58	
	3/8/2010	6,913.62	6,913.86		8.69	6,905.17	
	6/8/2010	6,913.62	6,913.86		8.37	6,905.49	
	9/15/2010	6,913.62	6,913.86		7.77	6,906.09	
	11/2/2010	6,913.62	6,913.86		7.62	6,906.24	
	3/2/2011	6,913.62	6,913.86		7.47	6,906.39	
	6/15/2011	6,913.62	6,913.86		7.96	6,905.90	
	9/27/2011	6,913.62	6,913.86		7.30	6,906.56	
	12/14/2011	6,913.62	6,913.86		7.45	6,906.41	
	6/12/2012	6,913.62	6,913.86		7.39	6,906.47	
	8/21/2012	6,913.62	6,913.86		7.07	6,906.79	
	11/28/2012	6,913.62	6,913.86		8.04	6,905.82	
	3/18/2013	6,913.62	6,913.86		7.84	6,906.02	
	6/12/2013	6,913.62	6,913.86		7.88	6,905.98	
	9/3/2013	6,913.62	6,913.86		6.64	6,907.22	
	11/12/2013	6,913.62	6,913.86		6.65	6,907.21	
	3/11/2014	6,913.62	6,913.86		6.78	6,907.08	
	6/5/2014	6,913.62	6,913.86		6.86	6,907.00	
	9/12/2014	6,913.62	6,913.86		6.85	6,907.01	
	11/11/2014	6,913.62	6,913.86		6.96	6,906.90	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure-ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water (1)	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
NAPIS 2 (KA-2R)	4/11/2008	6,913.40	6,912.65	13.61	8.83	6,903.82	4.2 - 14.2
	7/11/2008	6,913.40	6,912.65		8.96	6,903.69	
	11/4/2008	6,913.40	6,912.65		9.23	6,903.42	
	3/23/2009	6,913.40	6,912.65		9.35	6,903.30	
	5/28/2009	6,913.40	6,912.65		9.22	6,903.43	
	8/11/2009	6,913.40	6,912.65		9.39	6,903.26	
	11/23/2009	6,913.40	6,912.65		9.72	6,902.93	
	3/8/2010	6,913.40	6,912.65		9.19	6,903.46	
	6/8/2010	6,913.40	6,912.65		8.93	6,903.72	
	9/15/2010	6,913.40	6,912.65		8.57	6,904.08	
	11/2/2010	6,913.40	6,912.65		8.55	6,904.10	
	3/2/2011	6,913.40	6,912.65		9.14	6,903.51	
	6/15/2011	6,913.40	6,912.65		8.67	6,903.98	
	9/27/2011	6,913.40	6,912.65		8.18	6,904.47	
	12/14/2011	6,913.40	6,912.65		8.20	6,904.45	
	6/12/2012	6,913.40	6,912.65		9.40	6,903.25	
	8/21/2012	6,913.40	6,912.65		7.95	6,904.70	
	11/28/2012	6,913.40	6,912.65		8.09	6,904.56	
	3/18/2013	6,913.40	6,912.65		9.19	6,903.46	
	6/12/2013	6,913.40	6,912.65		9.00	6,903.65	
	9/3/2013	6,913.40	6,912.65		8.34	6,904.31	
	11/12/2013	6,913.40	6,912.65		8.20	6,904.45	
	3/11/2014	6,913.40	6,912.65		8.03	6,904.62	
	6/5/2014	6,913.40	6,912.65		8.2	6,904.45	
	9/12/2014	6,913.40	6,912.65		8.1	6,904.55	
	11/11/2014	6,913.40	6,912.65		8.2	6,904.45	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure-ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water [1]	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
NAPIS 3 (KA-3R)	4/11/2008	6,913.38	6,912.76	30.42	14.98	6,897.78	25.4 - 30-4
	7/11/2008	6,913.38	6,912.76		9.72	6,903.04	
	11/4/2008	6,913.38	6,912.76		8.71	6,904.05	
	3/23/2009	6,913.38	6,912.76		9.93	6,902.83	
	6/15/2009	6,913.38	6,912.76		8.59	6,904.17	
	8/31/2009	6,913.38	6,912.76		8.39	6,904.37	
	11/23/2009	6,913.38	6,912.76		21.62	6,891.14	
	3/8/2010	6,913.38	6,912.76		9.24	6,903.52	
	6/10/2010	6,913.38	6,912.76		8.87	6,903.89	
	9/15/2010	6,913.38	6,912.76		7.31	6,905.45	
	11/2/2010	6,913.38	6,912.76		8.65	6,904.11	
	3/2/2011	6,913.38	6,912.76		8.11	6,904.65	
	6/15/2011	6,913.38	6,912.76		7.89	6,904.87	
	9/27/2011	6,913.38	6,912.76		7.74	6,905.02	
	12/14/2011	6,913.38	6,912.76		8.30	6,904.46	
	6/12/2012	6,913.38	6,912.76		7.41	6,905.35	
	8/21/2012	6,913.38	6,912.76		8.56	6,904.20	
	11/28/2012	6,913.38	6,912.76		8.30	6,904.46	
	3/18/2013	6,913.38	6,912.76		9.10	6,903.66	
	6/12/2013	6,913.38	6,912.76		8.64	6,904.12	
	9/3/2013	6,913.38	6,912.76		8.92	6,903.84	
	11/12/2013	6,913.38	6,912.76		8.61	6,904.15	
	3/11/2014	6,913.38	6,912.76		8.9	6,903.86	
	6/5/2014	6,913.38	6,912.76		8.85	6,903.91	
	9/12/2014	6,913.38	6,912.76		7.97	6,904.79	
	11/11/2014	6,913.38	6,912.76		9.18	6,903.58	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure-ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water (1)	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
KA-3	11/4/2008	6,913.29	6,912.52	23.20	9.01	6,903.51	15 - 25
	3/23/2009	6,913.29	6,912.52		9.23	6,903.29	
	5/28/2009	6,913.29	6,912.52		9.12	6,903.40	
	8/31/2009	6,913.29	6,912.52		9.36	6,903.16	
	11/23/2009	6,913.29	6,912.52		9.60	6,902.92	
	3/8/2010	6,913.29	6,912.52		8.74	6,903.78	
	6/10/2010	6,913.29	6,912.52		8.39	6,904.13	
	9/15/2010	6,913.29	6,912.52		8.69	6,903.83	
	11/2/2010	6,913.29	6,912.52		8.52	6,904.00	
	3/2/2011	6,913.29	6,912.52		8.51	6,904.01	
	6/15/2011	6,913.29	6,912.52		8.44	6,904.08	
	9/27/2011	6,913.29	6,912.52		8.11	6,904.41	
	12/14/2011	6,913.29	6,912.52		8.08	6,904.44	
	6/12/2012	6,913.29	6,912.52		7.97	6,904.55	
	8/21/2012	6,913.29	6,912.52		7.98	6,904.54	
	11/28/2012	6,913.29	6,912.52		7.97	6,904.55	
	3/18/2013	6,913.29	6,912.52		9.07	6,903.45	
	6/12/2013	6,913.29	6,912.52		8.88	6,903.64	
	9/3/2013	6,913.29	6,912.52		8.35	6,904.17	
	11/12/2013	6,913.29	6,912.52		7.91	6,904.61	
	3/11/2014	6,913.29	6,912.52		8.03	6,904.49	
	6/5/2014	6,913.29	6,912.52		7.95	6,904.57	
	9/12/2014	6,913.29	6,912.52		9	6,903.52	
	11/11/2014	6,913.29	6,912.52		8	6,904.52	
OAPIS-1	10/15/2012	6,914.37	6,916.73	28.30	10.6	6,906.13	16 - 26
	3/18/2013	6,914.37	6,916.73		11.18	6,905.55	
	6/12/2013	6,914.37	6,916.73		11.50	6,905.23	
	9/3/2013	6,914.37	6,916.73		10.69	6,906.04	
	11/11/2013	6,914.37	6,916.73		10.90	6,905.83	
	3/11/2014	6,914.37	6916.73		11.5	6,905.23	
	6/5/2014	6,914.37	6,916.73		11.75	6,904.98	
	9/12/2014	6,914.37	6,916.73		11.11	6,905.62	
	11/11/2014	6,914.37	6,916.73		17.21	6,899.52	

1 - no free product measured in any wells

TABLE 3
SWMU 1 Soil Boring Samples - Vapor Screening Results
Western Refining Company Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Sample Interval Depth	SWMU 1-1	SWMU 1-2	SWMU 1-3	SWMU 1-4	SWMU 1-5	SWMU 1-6	SWMU 1-7	SWMU 1-8	SWMU 1-9	SWMU 1-10	SWMU 1-11	SWMU 1-12	SWMU 1-13	SWMU 1-14	SWMU 1-15	SWMU 1-16	SWMU 1-17	SWMU 1-18	SWMU 1-19	SWMU 1-20
0 – 2'	12.9	3	17.3	2.9	6.8	10.5	7.6	26.5	3.2/7.0	10.1/6.1	38.9/3.7	63/4.4	3.1	5.7/4.7	5.7/9.3	7.7/5.7	9.5/6.7	8.2/5.2	4.1	21.7
2 – 4'	245	3.7	21.3	3.8	8.1	37.5	4.8	9.9					35.7							4.6
4 – 6'	NR	6.1	10.3	3.0	8.4	15.9	5.1	13.5					15.6							2.5
6 – 8'	333	2.8	18.9	3.1	2.5	5.8/4.9	4.0	8.8												2.8
8 –10'	144	NR	14.2	3.1	3.8	7.8	1.7	10.0												3.9
10 – 12'	399	4.7/4.3	16.3/12.3	7.8	9.8	9.6/0.8	0.5	15.8												1.5
12 – 14'	148/199	3.2	7.4	13.2	8.2		0.4	161												
14 – 16'		3.7	8.9	NR	11.0		5.9	9.9												
16 – 18'		7.2	11.3/10.7	11.8/16.4	16.1		2.8	8.3												
18 – 20'		2.9/2.3	5.4/6.1	8.5	12.8			14.0/10.5												
20 – 22'				8.5	5.7															
22 – 24'				5.6/5.2	5.5															
24 – 26'					10.9															
26 – 28'					3.0/4.1															

Sample Interval Depth	SWMU 1-21	SWMU 1-22	SWMU 1-23	SWMU 1-24	SWMU 1-25	SWMU 1-26	SWMU 1-27	SWMU 1-28	SWMU 1-29	SWMU 1-30	SWMU 1-31	SWMU 1-32	SWMU 1-33	SWMU 1-34	SWMU 1-35	SWMU 1-36	SWMU 1-37	SWMU 1-38	SWMU 1-39
0 – 2'	1.4	4.9/6.8	3.7	4.6	4.1/4.7	6.5	14.5	4.0	3.6	4.6	3.9	0.7	3.1	3.2	0.8	1.9	4.9	10.3	4.4
2 – 4'				6.4			18.2	4.8		6.6					4.7		13.6	8.5	
4 – 6'				14.4						6.7					1.7		12.8	8.2	
6 – 8'				22.9													16.6	11.7	
8 –10'				13.3													8.8		
10 – 12'				15.7													14.6		
12 – 14'				11.7													14.6/11.4		
14 – 16'				17.8													12.3		
16 – 18'				28.0													NR		
18 – 20'				27.0															
20 – 22'				27.1															
22 – 24'				17.7															
24 – 26'				19.5															
26 – 28'				22.8															
28 – 30'				16.7															
30 – 32'				13.2															
32 – 34'				10.9															

UNITS - PPM
NR = No Recover

TABLE 3
SWMU 14 Soil Boring Samples - Vapor Screening Results
Western Refining Company Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Sample Interval Depth	SWMU 14-1	OAPIS-1 (SWMU 14-2)	SWMU 14-3	SWMU 14-4	SWMU 14-5	SWMU 14-6	SWMU 14-7	SWMU 14-8	SWMU 14-9	SWMU 14-10	SWMU 14-11	SWMU 14-12
0 – 2'	5.0/12.6	2.9/280	14.3/6.2	5.9/6.2	5.7/7.4	0.7	141/197	8.2/3717	4.9/106	0.3/0.4	5.3/38.5	949/1094
2 – 4'	7.2	56.8	101	28.2		3.9	293		1712			
4 – 6'	13.9	69.4	122	23.1		306	365		1959			
6 – 8'	13.2	87.5	104	19.2		364	935		582			
8 –10'	21.0	330	343	581		345	649		10.9			
10 – 12'	105.9	294	155	711		367	NR		11.3			
12 – 14'	12.4	14.6	326	34.5		13.6	265		10.8			
14 – 16'	10.9	5.7	NM	8.7		10.5	108					
16 – 18'	10.9	10.7	NM	6.5		4.6	74					
18 – 20'	14.9	NM	NM	2.5			9.9					
20 – 22'	15.8	17.9	8.5				3.2					
22 – 24'	13.0	12.8	5.4				3.3					
24 – 26'	13.7	13.2	2.3									
26 – 28'	9.5											
28 – 30'	9.6											
30 – 32'	5.0											
32 – 34'	10.3											
34 – 36'	9.9											
36 – 38'	3.0											
38 – 40'	8.2											
40 – 42'	2.1											
42 – 44'	3.1											
44 – 46'	4.0											
46 – 48'	4.3											
48 – 50'	3.2											

Sample Interval Depth	SWMU 14-13	SWMU 14-14	SWMU 14-15	SWMU 14-16	SWMU 14-17	SWMU 14-18	SWMU 14-19	SWMU 14-20	SWMU 14-21	SWMU 14-22	SWMU 14-23	SWMU 14-24
0 – 2'	300/975	567/1028	2.8/5000	10.8/375.5	10.9/898	5.0/2537	4.4/5.1	2.0	10.5	2.9	11.0	3.0/4.0
2 – 4'									4.6	7.3	14.8	
4 – 6'									8.6	7.9	13.6	
6 – 8'									7.6	7.3	385.0	
8 –10'									4.5	4.9	112.0	
10 – 12'											315.0	
12 – 14'											398.0	
14 – 16'											52.0	
16 – 18'											120.0	
18 – 20'											NR	
20 – 22'											NR	

UNITS - PPM
NR - No Recovery
NM - No Measurement

TABLE 4
Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
	NMED		EPA		NMED	EPA		NMED	EPA	
Analyte	Residential Soil (mg/kg)	Endpoint	Residential Soil (mg/kg)	ResSoil key	DAF1 (mg/kg)	GW_Risk-based SSL (mgkg)	GW_MCL-based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
Applicable depth interval	0-10'		0-2'		All depths			All depths		
Acenaphthene	3.44E+03	n	3.40E+03	n	1.69E+01	4.10E+00	-	7.79E+03	1.89E+03	-
Acenaphthylene	-	-	-	-	-	-	-	-	-	-
Acetone	6.66E+04	n	6.10E+04	n	3.86E+00	2.40E+00	-	1.78E+03	1.11E+03	-
Aniline	-	-	8.50E+01	c**	-	3.90E-03	-	-	1.80E+00	-
Anthracene	1.72E+04	n	1.70E+04	n	2.71E+02	4.20E+01	-	1.25E+05	1.94E+04	-
Antimony	3.13E+01	n	3.10E+01	n	6.61E-01	2.70E-01	0.27	3.05E+02	1.24E+02	1.24E+02
Arsenic	3.90E+00	c	3.90E-01	c*	1.31E-02	1.30E-03	0.29	6.05E+00	5.99E-01	1.34E+02
Azobenzene	-	-	5.10E+00	c	-	8.00E-04	-	-	3.69E-01	-
Barium	1.56E+04	n	1.50E+04	n	3.01E+02	1.20E+02	82	1.39E+05	5.53E+04	3.78E+04
Benz(a)anthracene	1.48E+00	c	1.50E-01	c	7.83E-02	1.00E-02	-	3.61E+01	4.61E+00	-
Benzene	1.54E+01	c	1.10E+00	c*	1.73E-03	2.00E-04	0.0026	7.96E-01	9.22E-02	1.20E+00
Benzo(a)pyrene	1.48E-01	c	1.50E-02	c	2.60E-02	3.50E-03	0.24	1.20E+01	1.61E+00	1.11E+02
Benzo(b)fluoranthene	1.48E+00	c	1.50E-01	c	2.65E-01	3.50E-02	-	1.22E+02	1.61E+01	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	1.48E+01	c	1.50E+00	c	2.60E+00	3.50E-01	-	1.20E+03	1.61E+02	-
Benzoic acid	-	-	2.40E+05	nm	-	1.40E+01	-	-	6.45E+03	-
Benzyl alcohol	-	-	6.10E+03	n	-	3.70E-01	-	-	1.71E+02	-
Beryllium	1.56E+02	n	1.60E+02	n	5.77E+01	1.30E+01	3.2	2.66E+04	5.99E+03	1.48E+03
Bis(2-chloroethoxy)methane	-	-	1.80E+02	n	-	1.10E-02	-	-	5.07E+00	-
Bis(2-chloroethyl)ether	2.68E+00	c	2.10E-01	c	2.63E-05	3.10E-06	-	1.21E-02	1.43E-03	-
Bis(2-chloroisopropyl)ether	9.15E+01	c	4.60E+00	c	2.33E-03	1.10E-04	-	1.07E+00	5.07E-02	-
Bis(2-ethylhexyl)phthalate	3.47E+02	cs	3.50E+01	c*	8.62E+00	1.70E-02	1.4	3.97E+03	7.84E+00	6.45E+02
Bromobenzene	-	-	3.00E+02	n	-	3.60E-02	-	-	1.66E+01	-
Bromodichloromethane	5.41E+00	c	2.70E-01	c	2.71E-04	3.20E-05	0.022	1.25E-01	1.48E-02	1.01E+01
Bromoform	6.16E+02	c	6.20E+01	c*	6.04E-01	2.10E-03	0.021	2.78E+02	9.68E-01	9.68E+00
Bromomethane	1.65E+01	n	7.30E+00	n	1.92E-03	1.80E-03	-	8.86E-01	8.30E-01	-
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
2-Butanone (MEK)	3.71E+04	n	2.80E+04	n	1.27E+00	1.00E+00	-	5.87E+02	4.61E+02	-
Butyl benzyl phthalate	-	-	2.60E+02	c*	-	2.00E-01	-	-	9.22E+01	-
Cadmium	7.03E+01	n	7.00E+01	n	1.37E+00	-	-	6.33E+02	-	-
Carbazole	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	1.53E+03	ns	8.20E+02	ns	2.83E-01	2.10E-01	-	1.30E+02	9.68E+01	-
Carbon tetrachloride	1.08E+01	c	6.10E-01	c	1.60E-03	1.50E-04	0.0019	7.39E-01	6.92E-02	8.76E-01
Chlorobenzene	3.76E+02	ns	2.90E+02	n	4.92E-02	4.90E-02	0.068	2.27E+01	2.26E+01	3.13E+01
Chloroethane	2.98E+04	ns	1.50E+04	ns	5.37E+00	5.90E+00	-	2.48E+03	2.72E+03	-
Chloroform	5.86E+00	c	2.90E-01	c	4.59E-04	5.30E-05	0.022	2.12E-01	2.44E-02	1.01E+01
Chloromethane	2.75E+02	n	1.20E+02	n	4.40E-02	4.90E-02	-	2.03E+01	2.26E+01	-
4-Chloro-3-methylphenol	-	-	6.10E+03	n	-	1.30E+00	-	-	5.99E+02	-
4-Chloroaniline	-	-	2.40E+00	c	-	1.30E-04	-	-	5.99E-02	-
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	-	-	1.60E+03	ns	-	1.80E-01	-	-	8.30E+01	-
2-Chloronaphthalene	6.11E+01	n	6.30E+03	ns	8.69E-04	2.90E+00	-	4.01E-01	1.34E+03	-
2-Chlorophenol	3.91E+02	n	3.90E+02	n	1.16E-01	5.70E-02	-	5.33E+01	2.63E+01	-
2-Chlorotoluene	1.56E+03	ns	1.60E+03	ns	5.58E-01	1.70E-01	-	2.57E+02	7.84E+01	-
Chromium III	1.17E+05	nl	1.20E+05	nm	9.86E+07	2.80E+07	-	4.54E+10	1.29E+10	-
Chromium VI	2.97E+00	c	2.90E-01	c	8.31E-03	5.90E-04	-	3.83E+00	2.72E-01	-
Chrysene	1.48E+02	c	1.50E+01	c	7.99E+00	1.10E+00	-	3.68E+03	5.07E+02	-
cis-1,2-DCE	1.56E+02	n	1.60E+02	n	1.84E-02	8.20E-03	2.10E-02	8.47E+00	3.78E+00	9.68E+00
cis-1,3-Dichloropropene	3.37E+01	c	-	-	1.24E-03	-	-	5.71E-01	-	-
Cobalt	-	-	2.30E+01	n	-	2.10E-01	-	-	9.68E+01	-
Cyanide	4.69E+01	n	4.70E+01	n	2.21E-01	9.40E-02	2	1.02E+02	4.33E+01	9.22E+02
1,1-Dichloroethane	6.45E+01	c	3.30E+00	c	5.98E-03	6.80E-04	-	2.75E+00	3.13E-01	-
1,1-Dichloroethene	4.49E+02	n	2.40E+02	n	1.16E-01	9.30E-02	0.0025	5.36E+01	4.29E+01	1.15E+00
1,1-Dichloropropene	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	1.86E+00	c	5.40E-03	c	1.10E-06	1.40E-07	8.60E-05	5.07E-04	6.45E-05	3.96E-02
1,2-Dibromoethane (EDB)	5.88E-01	c	3.40E-02	c	1.54E-05	1.80E-06	1.40E-05	7.10E-03	8.30E-04	6.45E-03

TABLE 4
Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
	NMED		EPA		NMED	EPA		NMED	EPA	
Analyte	Residential Soil (mg/kg)	Endpoint	Residential Soil (mg/kg)	ResSoil key	DAF1 (mg/kg)	GW_Risk-based SSL (mgkg)	GW_MCL-based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
Applicable depth interval	0-10'		0-2'		All depths			All depths		
1,2-Dichlorobenzene	2.31E+03	ns	1.90E+03	ns	2.80E-01	2.70E-01	0.58	1.29E+02	1.24E+02	2.67E+02
3,3´-Dichlorobenzidine	1.08E+01	c	1.10E+00	c	7.40E-03	7.10E-04	-	3.41E+00	3.27E-01	-
1,2-Dichloroethane (EDC)	7.89E+00	c	4.30E-01	c*	3.56E-04	4.20E-05	0.0014	1.64E-01	1.94E-02	6.45E-01
1,2-Dichloropropane	1.52E+01	c	9.40E-01	c*	1.07E-03	1.30E-04	0.0017	4.94E-01	5.99E-02	7.84E-01
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	-	-	1.60E+03	ns	-	9.90E-02	-	-	4.56E+01	-
1,4-Dichlorobenzene	3.17E+01	c	2.40E+00	c	3.19E-03	4.00E-04	0.072	1.47E+00	1.84E-01	3.32E+01
2,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	1.83E+02	n	1.80E+02	n	9.98E-02	4.10E-02	-	4.60E+01	1.89E+01	-
2,4-Dimethylphenol	1.22E+03	n	1.20E+03	n	6.65E-01	3.20E-01	-	3.07E+02	1.48E+02	-
4,6-Dinitro-2-methylphenol	-	-	4.90E+00	n	-	2.00E-03	-	-	9.22E-01	-
2,4-Dinitrophenol	1.22E+02	n	1.20E+02	n	6.31E-02	3.40E-02	-	2.91E+01	1.57E+01	-
2,4-Dinitrotoluene	1.57E+01	c	1.60E+00	c*	2.25E-03	2.80E-04	-	1.04E+00	1.29E-01	-
2,6-Dinitrotoluene	6.11E+01	n	6.10E+01	n	3.85E-02	2.00E-02	-	1.77E+01	9.22E+00	-
Dibenz(a,h)anthracene	1.48E-01	c	1.50E-02	c	8.46E-02	1.10E-02	-	3.90E+01	5.07E+00	-
Dibenzofuran	-	-	7.80E+01	n	-	1.10E-01	-	-	5.07E+01	-
Dibromochloromethane	1.21E+01	c	6.80E-01	c	3.31E-04	3.90E-05	2.10E-02	1.52E-01	1.80E-02	9.68E+00
Dibromomethane	5.16E+01	n	2.50E+01	n	1.71E-03	1.90E-03	-	7.89E-01	8.76E-01	-
Dichlorodifluoromethane	1.68E+02	n	9.40E+01	n	3.72E-01	3.00E-01	-	1.71E+02	1.38E+02	-
Diethyl phthalate	4.89E+04	n	4.90E+04	n	9.66E+00	4.70E+00	-	4.45E+03	2.17E+03	-
Dimethyl phthalate	6.11E+05	nl	-	-	8.06E+01	-	-	3.71E+04	-	-
Di-n-butyl phthalate	6.11E+03	n	6.10E+03	n	6.97E+00	1.70E+00	-	3.21E+03	7.84E+02	-
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	6.84E+01	c	5.40E+00	c	1.30E-02	1.50E-03	7.80E-01	5.98E+00	6.92E-01	3.60E+02
Fluoranthene	2.29E+03	n	2.30E+03	n	1.22E+02	7.00E+01	-	5.61E+04	3.23E+04	-
Fluorene	2.29E+03	n	2.30E+03	n	2.03E+01	4.00E+00	-	9.36E+03	1.84E+03	-
Hexachlorobenzene	3.04E+00	c	3.00E-01	c	3.98E-03	5.30E-04	1.30E-02	1.83E+00	2.44E-01	5.99E+00
Hexachlorobutadiene	6.11E+01	n	6.20E+00	c**	1.28E-02	5.00E-04	-	5.91E+00	2.31E-01	-
Hexachlorocyclopentadiene	3.67E+02	n	3.70E+02	n	5.27E-01	7.00E-02	1.60E-01	2.43E+02	3.23E+01	7.38E+01
Hexachloroethane	4.28E+01	n	1.20E+01	c**	8.18E-03	4.80E-04	-	3.77E+00	2.21E-01	-
2-Hexanone	9.38E+02	ns	2.10E+02	n	7.65E+00	7.90E-03	-	3.53E+03	3.64E+00	-
Indeno(1,2,3-cd)pyrene	1.48E+00	c	1.50E-01	c	8.63E-01	1.20E-01	-	3.98E+02	5.53E+01	-
Iron	5.48E+04	n	5.50E+04	n	6.46E+02	2.70E+02	-	2.98E+05	1.24E+05	-
Isophorone	5.12E+03	c	5.10E+02	c*	1.92E-01	2.20E-02	-	8.84E+01	1.01E+01	-
Isopropylbenzene (cumene)	2.43E+03	ns	2.10E+03	ns	8.65E-01	6.40E-01	-	3.99E+02	2.95E+02	-
4-Isopropyltoluene	-	-	-	-	-	-	-	-	-	-
Lead	4.00E+02	IEUBK	4.00E+02	L	-	-	1.40E+01	-	-	6.45E+03
Manganese	1.86E+03	n	-	-	5.72E+01	-	-	2.64E+04	-	-
Mercury	1.56E+01	ns	1.00E+01	ns	3.27E-02	3.30E-02	0.1	1.51E+01	1.52E+01	4.61E+01
Methyl tert-butyl ether (MTBE)	9.01E+02	c	4.30E+01	c	2.41E-02	2.80E-03	-	1.11E+01	1.29E+00	-
Methylene chloride	4.09E+02	n	5.60E+01	c**	4.12E-02	2.50E-03	1.30E-03	1.90E+01	1.15E+00	5.99E-01
1-Methylnaphthalene	-	-	1.60E+01	c	-	5.10E-03	-	-	2.35E+00	-
2-Methylnaphthalene	-	-	2.30E+02	n	-	1.40E-01	-	-	6.45E+01	-
2-Methylphenol	-	-	3.10E+03	n	-	5.80E-01	-	-	2.67E+02	-
3+4-Methylphenol	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	-	-	5.30E+03	ns	-	2.30E-01	-	-	1.06E+02	-
2-Nitroaniline	-	-	6.10E+02	n	-	6.20E-02	-	-	2.86E+01	-
3-Nitroaniline	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	-	-	2.40E+01	c*	-	1.40E-03	-	-	6.45E-01	-
2-Nitrophenol	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-	-	-	-
Naphthalene	4.30E+01	c	3.60E+00	c*	3.57E-03	4.70E-04	-	1.64E+00	2.17E-01	-
n-Butylbenzene	-	-	3.90E+03	ns	-	2.50E+00	-	-	1.15E+03	-
Nickel	1.56E+03	n	1.50E+03	n	4.77E+01	2.00E+01	-	2.20E+04	9.22E+03	-
Nitrobenzene	5.35E+01	c	4.80E+00	c*	6.24E-04	7.90E-05	-	2.88E-01	3.64E-02	-
N-Nitrosodi-n-propylamine	-	-	6.90E-02	c	-	7.00E-06	-	-	3.23E-03	-

TABLE 4
Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
	NMED		EPA		NMED	EPA		NMED	EPA	
Analyte	Residential Soil (mg/kg)	Endpoint	Residential Soil (mg/kg)	ResSoil key	DAF1 (mg/kg)	GW_Risk-based SSL (mgkg)	GW_MCL-based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
Applicable depth interval	0-10'		0-2'		All depths			All depths		
N-Nitrosodiphenylamine	9.93E+02	c	9.90E+01	c	5.65E-01	5.70E-02	-	2.61E+02	2.63E+01	-
n-Propylbenzene	-	-	3.40E+03	ns	-	9.90E-01	-	-	4.56E+02	-
Pentachlorophenol	8.94E+00	c	8.90E-01	c	1.28E-02	3.60E-04	0.01	5.90E+00	1.66E-01	4.61E+00
Phenanthrene	1.83E+03	ns	-	-	2.86E+01	-	-	1.32E+04	-	-
Phenol	1.83E+04	n	1.80E+04	n	4.97E+00	2.60E+00	-	2.29E+03	1.20E+03	-
Pyrene	1.72E+03	n	1.70E+03	n	8.94E+01	9.50E+00	-	4.12E+04	4.38E+03	-
Pyridine	-	-	7.80E+01	n	-	5.30E-03	-	-	2.44E+00	-
sec-Butylbenzene	-	-	-	-	-	-	-	-	-	-
Selenium	3.91E+02	n	3.90E+02	n	9.65E-01	4.00E-01	2.60E-01	4.45E+02	1.84E+02	1.20E+02
Silver	3.91E+02	n	3.90E+02	n	1.57E+00	6.00E-01	-	7.22E+02	2.77E+02	-
Styrene	7.28E+03	ns	6.30E+03	ns	1.39E+00	1.20E+00	0.11	6.40E+02	5.53E+02	5.07E+01
1,2,3-Trichlorobenzene	-	-	4.90E+01	n	-	1.50E-02	-	-	6.92E+00	-
1,1,1,2-Tetrachloroethane	2.91E+01	c	1.90E+00	c	1.65E-03	1.90E-04	-	7.59E-01	8.76E-02	-
1,1,1-Trichloroethane	1.56E+04	ns	8.70E+03	ns	2.91E+00	2.60E+00	0.07	1.34E+03	1.20E+03	3.23E+01
1,1,2,2-Tetrachloroethane	8.02E+00	c	5.60E-01	c	2.13E-04	2.60E-05	-	9.82E-02	1.20E-02	-
1,1,2-Trichloroethane	2.81E+00	n	1.10E+00	c**	1.12E-04	7.70E-05	0.0016	5.14E-02	3.55E-02	7.38E-01
2,4,5-Trichlorophenol	6.11E+03	n	6.10E+03	n	1.04E+01	3.30E+00	-	4.78E+03	1.52E+03	-
2,4,6-Trichlorophenol	6.11E+01	n	4.40E+01	c**	1.04E-01	1.30E-02	-	4.78E+01	5.99E+00	-
1,2,3-Trichloropropane	4.97E-02	c	5.00E-03	c	2.50E-06	2.80E-07	-	1.15E-03	1.29E-04	-
1,2,4-Trichlorobenzene	7.30E+01	n	2.20E+01	c**	9.13E-03	2.90E-03	0.2	4.21E+00	1.34E+00	9.22E+01
1,2,4-Trimethylbenzene	-	-	6.20E+01	n	-	2.10E-02	-	-	9.68E+00	-
1,3,5-Trimethylbenzene	-	-	7.80E+02	ns	-	1.20E-01	-	-	5.53E+01	-
tert-Butylbenzene	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	7.02E+00	c	2.20E+01	c**	4.30E-04	4.40E-03	0.0023	1.98E-01	2.03E+00	1.06E+00
Toluene	5.27E+03	ns	5.00E+03	ns	1.27E+00	5.90E-01	0.69	5.84E+02	2.72E+02	3.18E+02
trans-1,2-DCE	2.70E+02	n	1.50E+02	n	2.69E-02	2.50E-02	2.90E-02	1.24E+01	1.15E+01	1.34E+01
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	-
Trichloroethene (TCE)	8.77E+00	n	9.10E-01	c**	1.05E-03	1.60E-04	0.0018	4.85E-01	7.38E-02	8.30E-01
Trichlorofluoromethane	1.41E+03	ns	7.90E+02	n	8.89E-01	6.90E-01	-	4.10E+02	3.18E+02	-
Vanadium	3.91E+02	n	3.90E+02	n	1.83E+02	7.80E+01	-	8.42E+04	3.60E+04	-
Vinyl chloride	7.28E-01	c	6.00E-02	c	5.42E-05	5.30E-06	0.00069	2.50E-02	2.44E-03	3.18E-01
Xylenes, Total	8.14E+02	ns	6.30E+02	ns	1.56E-01	1.90E-01	9.8	7.21E+01	8.76E+01	4.52E+03
Zinc	2.35E+04	n	2.30E+04	n	6.82E+02	2.90E+02	-	3.14E+05	1.34E+05	-

c - carcinogen
n - noncarcinogen
cs - carcinogen, SSL November exceed saturation
ns - noncarcinogen, SSL November exceed saturation
nl - noncarcinogen, SSL may exceed ceiling limit
nls - noncarcinogen, SSL may exceed both saturation and ceiling limit
* = where n SL < 100X c SL, ** = where n SL < 10X c SL

-	no screenig value currently available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (November 2012)

TABLE 5
Non-Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte	NMED		EPA		Cross Media Soil-to-Ground Water NMED	Cross Media Soil-to-Ground Water EPA		Cross Media Soil-to-Ground Water NMED	Cross Media Soil-to-Ground Water EPA	
	ConsWork (mg/kg)	ConsWork Soil (Endpoint)	Industrial (mg/kg)	IndSoil _key	DAF1 (mg/kg)	GW_Risk-based SSL (mg/kg)	GW_MCL-based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
Applicable depth interval	0-10'		0-2'		All depths			All depths		
Acenaphthene	1.86E+04	n	3.30E+04	n	1.69E+01	4.10E+00	-	7.79E+03	1.89E+03	-
Acenaphthylene	-	-	-	-	-	-	-	-	-	-
Acetone	2.21E+05	nls	6.30E+05	nms	3.86E+00	2.40E+00	-	1.78E+03	1.11E+03	-
Aniline	-	-	3.00E+02	c*	-	3.90E-03	-	-	1.80E+00	-
Anthracene	6.68E+04	n	1.70E+05	nm	2.71E+02	4.20E+01	-	1.25E+05	1.94E+04	-
Antimony	1.24E+02	n	4.10E+02	n	6.61E-01	2.70E-01	0.27	3.05E+02	1.24E+02	1.24E+02
Arsenic	5.30E+01	n	1.60E+00	c	1.31E-02	1.30E-03	0.29	6.05E+00	5.99E-01	1.34E+02
Azobenzene	-	-	2.30E+01	c	-	8.00E-04	-	-	3.69E-01	-
Barium	4.35E+03	n	1.90E+05	nm	3.01E+02	1.20E+02	82	1.39E+05	5.53E+04	3.78E+04
Benz(a)anthracene	2.13E+02	c	2.10E+00	c	7.83E-02	1.00E-02	-	3.61E+01	4.61E+00	-
Benzene	1.38E+02	n	5.40E+00	c*	1.73E-03	2.00E-04	0.0026	7.96E-01	9.22E-02	1.20E+00
Benzo(a)pyrene	2.13E+01	c	2.10E-01	c	2.60E-02	3.50E-03	0.24	1.20E+01	1.61E+00	1.11E+02
Benzo(b)fluoranthene	2.13E+02	c	2.10E+00	c	2.65E-01	3.50E-02	-	1.22E+02	1.61E+01	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	2.06E+03	c	2.10E+01	c	2.60E+00	3.50E-01	-	1.20E+03	1.61E+02	-
Benzoic acid	-	-	2.50E+06	nm	-	1.40E+01	-	-	6.45E+03	-
Benzyl alcohol	-	-	6.20E+04	n	-	3.70E-01	-	-	1.71E+02	-
Beryllium	1.44E+02	n	2.00E+03	n	5.77E+01	1.30E+01	3.2	2.66E+04	5.99E+03	1.48E+03
Bis(2-chloroethoxy)methane	-	-	1.80E+03	n	-	1.10E-02	-	-	5.07E+00	-
Bis(2-chloroethyl)ether	7.78E+01	c	1.00E+00	c	2.63E-05	3.10E-06	-	1.21E-02	1.43E-03	-
Bis(2-chloroisopropyl)ether	3.10E+03	cs	2.20E+01	c	2.33E-03	1.10E-04	-	1.07E+00	5.07E-02	-
Bis(2-ethylhexyl)phthalate	4.76E+03	n	1.20E+02	c	8.62E+00	1.70E-02	1.4	3.97E+03	7.84E+00	6.45E+02
Bromobenzene	-	-	1.80E+03	ns	-	3.60E-02	-	-	1.66E+01	-
Bromodichloromethane	1.43E+02	c	1.40E+00	c	2.71E-04	3.20E-05	0.022	1.25E-01	1.48E-02	1.01E+01
Bromoform	4.76E+03	n	2.20E+02	c*	6.04E-01	2.10E-03	0.021	2.78E+02	9.68E-01	9.68E+00
Bromomethane	1.64E+01	n	3.20E+01	n	1.92E-03	1.80E-03	-	8.86E-01	8.30E-01	-
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
2-Butanone (MEK)	8.43E+04	nls	2.00E+05	nms	1.27E+00	1.00E+00	-	5.87E+02	4.61E+02	-
Butyl benzyl phthalate	-	-	9.10E+02	c	-	2.00E-01	-	-	9.22E+01	-
Cadmium	2.77E+02	n	8.00E+02	n	1.37E+00	-	-	6.33E+02	-	-
Carbazole	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	1.58E+03	ns	3.70E+03	ns	2.83E-01	2.10E-01	-	1.30E+02	9.68E+01	-
Carbon tetrachloride	2.26E+02	ns	3.00E+00	c	1.60E-03	1.50E-04	0.0019	7.39E-01	6.92E-02	8.76E-01
Chlorobenzene	4.06E+02	ns	1.40E+03	ns	4.92E-02	4.90E-02	0.068	2.27E+01	2.26E+01	3.13E+01
Chloroethane	2.61E+04	nls	6.10E+04	ns	5.37E+00	5.90E+00	-	2.48E+03	2.72E+03	-
Chloroform	1.54E+02	c	1.50E+00	c	4.59E-04	5.30E-05	0.022	2.12E-01	2.44E-02	1.01E+01
Chloromethane	2.41E+02	n	5.00E+02	n	4.40E-02	4.90E-02	-	2.03E+01	2.26E+01	-
4-Chloro-3-methylphenol	-	-	6.20E+04	n	-	1.30E+00	-	-	5.99E+02	-
4-Chloroaniline	-	-	8.60E+00	c	-	1.30E-04	-	-	5.99E-02	-
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	-	-	2.00E+04	ns	-	1.80E-01	-	-	8.30E+01	-
2-Chloronaphthalene	2.94E+02	n	8.20E+04	ns	8.69E-04	2.90E+00	-	4.01E-01	1.34E+03	-
2-Chlorophenol	1.55E+03	n	5.10E+03	n	1.16E-01	5.70E-02	-	5.33E+01	2.63E+01	-
2-Chlorotoluene	6.19E+03	ns	2.00E+04	ns	5.58E-01	1.70E-01	-	2.57E+02	7.84E+01	-
Chromium III	4.65E+05	nl	1.50E+06	nm	9.86E+07	2.80E+07	-	4.54E+10	1.29E+10	-
Chromium VI	6.56E+01	c	5.60E+00	c	8.31E-03	5.90E-04	-	3.83E+00	2.72E-01	-
Chrysene	2.06E+04	c	2.10E+02	c	7.99E+00	1.10E+00	-	3.68E+03	5.07E+02	-
cis-1,2-DCE	6.19E+02	c	2.00E+03	n	1.84E-02	8.20E-03	2.10E-02	8.47E+00	3.78E+00	9.68E+00
cis-1,3-Dichloropropene	2.09E+02	ns	-	-	1.24E-03	-	-	5.71E-01	-	-
Cobalt	-	-	3.00E+02	n	-	2.10E-01	-	-	9.68E+01	-
Cyanide	1.86E+02	n	6.10E+02	n	2.21E-01	9.40E-02	2	1.02E+02	4.33E+01	9.22E+02
1,1-Dichloroethane	1.70E+03	cs	1.70E+01	c	5.98E-03	6.80E-04	-	2.75E+00	3.13E-01	-
1,1-Dichloroethene	4.32E+02	ns	1.10E+03	n	1.16E-01	9.30E-02	0.0025	5.36E+01	4.29E+01	1.15E+00
1,1-Dichloropropene	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	5.07E+00	c	6.90E-02	c	1.10E-06	1.40E-07	8.60E-05	5.07E-04	6.45E-05	3.96E-02
1,2-Dibromoethane (EDB)	1.60E+01	c	1.70E-01	c	1.54E-05	1.80E-06	1.40E-05	7.10E-03	8.30E-04	6.45E-03
1,2-Dichlorobenzene	2.71E+03	ns	9.80E+03	ns	2.80E-01	2.70E-01	0.58	1.29E+02	1.24E+02	2.67E+02
3,3´-Dichlorobenzidine	3.64E+02	c	3.80E+00	c	7.40E-03	7.10E-04	-	3.41E+00	3.27E-01	-
1,2-Dichloroethane (EDC)	5.87E+01	n	2.20E+00	c*	3.56E-04	4.20E-05	0.0014	1.64E-01	1.94E-02	6.45E-01
1,2-Dichloropropane	2.50E+01	n	4.70E+00	c*	1.07E-03	1.30E-04	0.0017	4.94E-01	5.99E-02	7.84E-01

TABLE 5
Non-Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte	NMED		EPA		Cross Media Soil-to-Ground Water NMED	Cross Media Soil-to-Ground Water EPA		Cross Media Soil-to-Ground Water NMED	Cross Media Soil-to-Ground Water EPA	
	ConsWork (mg/kg)	ConsWork Soil (Endpoint)	Industrial (mg/kg)	IndSoil _key	DAF1 (mg/kg)	GW_Risk-based SSL (mg/kg)	GW_MCL-based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	-	-	2.00E+04	ns	-	9.90E-02	-	-	4.56E+01	-
1,4-Dichlorobenzene	8.31E+02	cs	1.20E+01	c	3.19E-03	4.00E-04	0.072	1.47E+00	1.84E-01	3.32E+01
2,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	7.15E+02	n	1.80E+03	n	9.98E-02	4.10E-02	-	4.60E+01	1.89E+01	-
2,4-Dimethylphenol	4.76E+03	n	1.20E+04	n	6.65E-01	3.20E-01	-	3.07E+02	1.48E+02	-
4,6-Dinitro-2-methylphenol	-	-	4.90E+01	n	-	2.00E-03	-	-	9.22E-01	-
2,4-Dinitrophenol	4.76E+02	n	1.20E+03	n	6.31E-02	3.40E-02	-	2.91E+01	1.57E+01	-
2,4-Dinitrotoluene	4.76E+02	n	5.50E+00	c	2.25E-03	2.80E-04	-	1.04E+00	1.29E-01	-
2,6-Dinitrotoluene	2.38E+02	n	6.20E+02	n	3.85E-02	2.00E-02	-	1.77E+01	9.22E+00	-
Dibenz(a,h)anthracene	2.13E+01	c	2.10E-01	c	8.46E-02	1.10E-02	-	3.90E+01	5.07E+00	-
Dibenzofuran	-	-	1.00E+03	ns	-	1.10E-01	-	-	5.07E+01	-
Dibromochloromethane	3.32E+02	cs	3.30E+00	c	3.31E-04	3.90E-05	2.10E-02	1.52E-01	1.80E-02	9.68E+00
Dibromomethane	3.10E+03	ns	1.10E+02	n	1.71E-03	1.90E-03	-	7.89E-01	8.76E-01	-
Dichlorodifluoromethane	1.49E+02	ns	4.00E+02	n	3.72E-01	3.00E-01	-	1.71E+02	1.38E+02	-
Diethyl phthalate	1.91E+05	nl	4.90E+05	nm	9.66E+00	4.70E+00	-	4.45E+03	2.17E+03	-
Dimethyl phthalate	2.38E+06	nl	-	-	8.06E+01	-	-	3.71E+04	-	-
Di-n-butyl phthalate	2.38E+04	n	6.20E+04	n	6.97E+00	1.70E+00	-	3.21E+03	7.84E+02	-
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	1.83E+03	cs	2.70E+01	c	1.30E-02	1.50E-03	7.80E-01	5.98E+00	6.92E-01	3.60E+02
Fluoranthene	8.91E+03	n	2.20E+04	n	1.22E+02	7.00E+01	-	5.61E+04	3.23E+04	-
Fluorene	8.91E+03	ns	2.20E+04	n	2.03E+01	4.00E+00	-	9.36E+03	1.84E+03	-
Hexachlorobenzene	1.03E+02	c	1.10E+00	c	3.98E-03	5.30E-04	1.30E-02	1.83E+00	2.44E-01	5.99E+00
Hexachlorobutadiene	2.38E+02	n	2.20E+01	c*	1.28E-02	5.00E-04	-	5.91E+00	2.31E-01	-
Hexachlorocyclopentadiene	8.11E+02	n	3.70E+03	n	5.27E-01	7.00E-02	1.60E-01	2.43E+02	3.23E+01	7.38E+01
Hexachloroethane	1.67E+02	n	4.30E+01	c*	8.18E-03	4.80E-04	-	3.77E+00	2.21E-01	-
2-Hexanone	9.73E+02	ns	1.40E+03	n	7.65E+00	7.90E-03	-	3.53E+03	3.64E+00	-
Indeno(1,2,3-cd)pyrene	2.13E+02	c	2.10E+00	c	8.63E-01	1.20E-01	-	3.98E+02	5.53E+01	-
Iron	2.17E+05	nl	7.20E+05	nm	6.46E+02	2.70E+02	-	2.98E+05	1.24E+05	-
Isophorone	4.75E+04	n	1.80E+03	c*	1.92E-01	2.20E-02	-	8.84E+01	1.01E+01	-
Isopropylbenzene (cumene)	2.81E+03	ns	1.10E+04	ns	8.65E-01	6.40E-01	-	3.99E+02	2.95E+02	-
4-Isopropyltoluene	-	-	-	-	-	-	-	-	-	-
Lead	8.00E+02	IEUBK	8.00E+02	L	-	-	1.40E+01	-	-	6.45E+03
Manganese	4.40E+02	n	-	-	5.72E+01	-	-	2.64E+04	-	-
Mercury	1.36E+01	ns	4.30E+01	ns	3.27E-02	3.30E-02	0.1	1.51E+01	1.52E+01	4.61E+01
Methyl tert-butyl ether (MTBE)	2.49E+04	cs	2.20E+02	c	2.41E-02	2.80E-03	-	1.11E+01	1.29E+00	-
Methylene chloride	1.12E+03	ns	9.60E+02	c**	4.12E-02	2.50E-03	1.30E-03	1.90E+01	1.15E+00	5.99E-01
1-Methylnaphthalene	-	-	5.30E+01	c	-	5.10E-03	-	-	2.35E+00	-
2-Methylnaphthalene	-	-	2.20E+03	ns	-	1.40E-01	-	-	6.45E+01	-
2-Methylphenol	-	-	3.10E+04	n	-	5.80E-01	-	-	2.67E+02	-
3+4-Methylphenol	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	-	-	5.30E+04	ns	-	2.30E-01	-	-	1.06E+02	-
2-Nitroaniline	-	-	6.00E+03	n	-	6.20E-02	-	-	2.86E+01	-
3-Nitroaniline	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	-	-	8.60E+01	c*	-	1.40E-03	-	-	6.45E-01	-
2-Nitrophenol	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-	-	-	-
Naphthalene	1.58E+02	n	1.80E+01	c*	3.57E-03	4.70E-04	-	1.64E+00	2.17E-01	-
n-Butylbenzene	-	-	5.10E+04	ns	-	2.50E+00	-	-	1.15E+03	-
Nickel	6.19E+03	n	2.00E+04	n	4.77E+01	2.00E+01	-	2.20E+04	9.22E+03	-
Nitrobenzene	3.32E+02	n	2.40E+01	c*	6.24E-04	7.90E-05	-	2.88E-01	3.64E-02	-
N-Nitrosodi-n-propylamine	-	-	2.50E-01	c	-	7.00E-06	-	-	3.23E-03	-
N-Nitrosodiphenylamine	3.36E+04	c	3.50E+02	c	5.65E-01	5.70E-02	-	2.61E+02	2.63E+01	-
n-Propylbenzene	-	-	2.10E+04	ns	-	9.90E-01	-	-	4.56E+02	-
Pentachlorophenol	3.10E+02	c	2.70E+00	c	1.28E-02	3.60E-04	0.01	5.90E+00	1.66E-01	4.61E+00
Phenanthrene	7.15E+03	n	-	-	2.86E+01	-	-	1.32E+04	-	-
Phenol	6.88E+04	n	1.80E+05	nm	4.97E+00	2.60E+00	-	2.29E+03	1.20E+03	-
Pyrene	6.68E+03	n	1.70E+04	n	8.94E+01	9.50E+00	-	4.12E+04	4.38E+03	-
Pyridine	-	-	1.00E+03	n	-	5.30E-03	-	-	2.44E+00	-
sec-Butylbenzene	-	-	-	-	-	-	-	-	-	-
Selenium	1.55E+03	n	5.10E+03	n	9.65E-01	4.00E-01	2.60E-01	4.45E+02	1.84E+02	1.20E+02

TABLE 5
Non-Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte	NMED		EPA		Cross Media Soil-to-Ground Water NMED	Cross Media Soil-to-Ground Water EPA		Cross Media Soil-to-Ground Water NMED	Cross Media Soil-to-Ground Water EPA	
	ConsWork (mg/kg)	ConsWork Soil (Endpoint)	Industrial (mg/kg)	IndSoil _key	DAF1 (mg/kg)	GW_Risk-based SSL (mg/kg)	GW_MCL-based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
Silver	1.55E+03	n	5.10E+03	n	1.57E+00	6.00E-01	-	7.22E+02	2.77E+02	-
Styrene	9.99E+03	ns	3.60E+04	ns	1.39E+00	1.20E+00	0.11	6.40E+02	5.53E+02	5.07E+01
1,2,3-Trichlorobenzene	-	-	4.90E+02	ns	-	1.50E-02	-	-	6.92E+00	-
1,1,1,2-Tetrachloroethane	7.79E+02	cs	9.30E+00	c	1.65E-03	1.90E-04	-	7.59E-01	8.76E-02	-
1,1,1-Trichloroethane	1.48E+04	ns	3.80E+04	ns	2.91E+00	2.60E+00	0.07	1.34E+03	1.20E+03	3.23E+01
1,1,2,2-Tetrachloroethane	2.21E+02	c	2.80E+00	c	2.13E-04	2.60E-05	-	9.82E-02	1.20E-02	-
1,1,2-Trichloroethane	4.72E+02	ns	5.30E+00	c**	1.12E-04	7.70E-05	0.0016	5.14E-02	3.55E-02	7.38E-01
2,4,5-Trichlorophenol	2.38E+04	n	6.20E+04	n	1.04E+01	3.30E+00	-	4.78E+03	1.52E+03	-
2,4,6-Trichlorophenol	2.38E+02	n	1.60E+02	c**	1.04E-01	1.30E-02	-	4.78E+01	5.99E+00	-
1,2,3-Trichloropropane	7.23E+00	c	9.50E-02	c	2.50E-06	2.80E-07	-	1.15E-03	1.29E-04	-
1,2,4-Trichlorobenzene	6.87E+01	ns	9.90E+01	c**	9.13E-03	2.90E-03	0.2	4.21E+00	1.34E+00	9.22E+01
1,2,4-Trimethylbenzene	-	-	2.60E+02	ns	-	2.10E-02	-	-	9.68E+00	-
1,3,5-Trimethylbenzene	-	-	1.00E+04	ns	-	1.20E-01	-	-	5.53E+01	-
tert-Butylbenzene	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	2.12E+02	cs	1.10E+02	c**	4.30E-04	4.40E-03	0.0023	1.98E-01	2.03E+00	1.06E+00
Toluene	1.34E+04	ns	4.50E+04	ns	1.27E+00	5.90E-01	0.69	5.84E+02	2.72E+02	3.18E+02
trans-1,2-DCE	2.73E+02	ns	6.90E+02	n	2.69E-02	2.50E-02	2.90E-02	1.24E+01	1.15E+01	1.34E+01
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	-
Trichloroethene (TCE)	7.68E+00	cs	6.40E+00	c**	1.05E-03	1.60E-04	0.0018	4.85E-01	7.38E-02	8.30E-01
Trichlorofluoromethane	1.30E+03	ns	3.40E+03	ns	8.89E-01	6.90E-01	-	4.10E+02	3.18E+02	-
Vanadium	1.55E+03	n	5.20E+03	n	1.83E+02	7.80E+01	-	8.42E+04	3.60E+04	-
Vinyl chloride	1.49E+02	c	1.70E+00	c	5.42E-05	5.30E-06	0.00069	2.50E-02	2.44E-03	3.18E-01
Xylenes, Total	7.43E+02	ns	2.70E+03	ns	1.56E-01	1.90E-01	9.8	7.21E+01	8.76E+01	4.52E+03
Zinc	9.29E+04	n	3.10E+05	nm	6.82E+02	2.90E+02	-	3.14E+05	1.34E+05	-

c - carcinogen
n - noncarcinogen
cs - carcinogen, SSL November exceed saturation
ns - noncarcinogen, SSL November exceed saturation
-

nl - noncarcinogen, SSL may exceed ceiling limit
nls - noncarcinogen, SSL may exceed both saturation and ceiling limit
* = where n SL < 100X c SL, ** = where n SL < 10X c SL

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (November 2012)

Table 6
Groundwater Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

	NMED			EPA		
Analyte	NMED WQCC Standards (mg/L)	NMED Tap Water mg/L	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)
Acenaphthene	-	**2.19**	n	4.00E-01	n	-
Acenaphthylene	-	-	-	-	-	-
Acetone	-	**21.78289**	n	1.20E+01	n	-
Aniline	-	-	-	**1.20E-01**	c**	-
Anthracene	-	**10.95**	n	1.30E+00	n	-
Antimony	-	0.0146	n	6.00E-03	n	**0.006**
Arsenic	0.1	0.000448	c	4.50E-04	c	**0.01**
Azobenzene	-	-	-	**1.00E-03**	c	-
Barium	**1**	7.3	n	2.90E+00	n	2
Benz(a)anthracene	-	**0.000295**	c	2.90E-04	c	-
Benzene	0.01	0.00413	c	3.90E-03	c*	**0.005**
Benzo(a)pyrene	0.0007	2.95E-05	c	2.90E-05	c	**0.0002**
Benzo(b)fluoranthene	-	**0.000295**	c	2.90E-04	c	-
Benzo(g,h,i)perylene	-	-	-	-	-	-
Benzo(k)fluoranthene	-	**0.00295**	c	2.90E-03	c	-
Benzoic acid	-	-	-	**5.80E+01**	n	-
Benzyl alcohol	-	-	-	**1.50E+00**	n	-
Beryllium	-	0.073	n	1.60E-02	n	**0.004**
Bis(2-chloroethoxy)methane	-	-	-	**4.60E-02**	n	-
Bis(2-chloroethyl)ether	-	**0.000119**	c	1.20E-04	c	-
Bis(2-chloroisopropyl)ether	-	**0.0096**	c	3.10E-03	c	-
Bis(2-ethylhexyl)phthalate	-	0.048	c	4.80E-02	c*	**0.006**
Bromobenzene	-	-	-	**5.40E-02**	n	-
Bromodichloromethane	-	0.001173	c	1.20E-03	c	**0.08**
Bromoform	-	0.085063	c	7.90E-02	c*	**0.08**
Bromomethane	-	**0.008661**	n	7.00E-03	n	-
4-Bromophenyl phenyl ether	-	-	-	-	-	-
Butyl benzyl phthalate	-	-	-	**1.40E-01**	c*	-
2-Butanone (MEK)	-	**7.064516**	n	4.90E+00	n	-
Cadmium	0.01	0.01825	n	-	-	**-**
Carbazole	-	-	-	-	-	-
Carbon disulfide	-	**1.042857**	n	7.20E-01	n	-
Carbon tetrachloride	0.01	0.004396	c	3.90E-03	c	**0.005**
Chlorobenzene	-	0.09125	n	7.20E-02	n	**0.1**
Chloroethane	-	**20.85714**	n	2.10E+01	n	-
Chloroform	0.1	0.001928	c	1.90E-03	c	**0.08**
Chloromethane	-	**0.187714**	n	1.90E-01	n	-
4-Chloro-3-methylphenol	-	-	-	**1.10E+00**	n	-
4-Chloroaniline	-	-	-	**3.20E-03**	c	-
4-Chlorophenyl phenyl ether	-	-	-	-	-	-
4-Chlorotoluene	-	-	-	**1.90E-01**	n	-
2-Chloronaphthalene	-	**0.00121**	n	5.50E-01	n	-
2-Chlorophenol	-	**0.1825**	n	7.10E-02	n	-
2-Chlorotoluene	-	**0.73**	n	1.80E-01	n	-

Table 6
Groundwater Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

	NMED			EPA		
Analyte	NMED WQCC Standards (mg/L)	NMED Tap Water mg/L	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)
Chromium III	**0.05**	54.75	n	1.60E+00	n	-
Chromium VI	**0.05**	0.000431	c	3.10E-04	c	-
Chrysene	-	**0.029499**	c	2.90E-02	c	-
Cobalt	**0.05**	-	-	4.70E-03	n	-
Cyanide, Total	**0.2**	0.0219	n	1.40E-03	n	0.2
Dibenz(a,h)anthracene	-	**2.95E-05**	c	2.90E-05	c	-
Dibenzofuran	-	-	-	**5.80E-03**	n	-
Dibromochloromethane	-	0.001471	c	1.50E-03	c	**0.08**
cis-1,2-DCE	-	0.073	n	2.80E-02	n	**0.07**
trans-1,2-DCE	-	0.106829	n	8.60E-02	n	**0.1**
cis-1,3-Dichloropropene	-	**0.004329**	c	-	-	-
trans-1,3-Dichloropropene	-	-	-	**-**	-	-
Dibromomethane	-	**0.008156**	n	7.90E-03	n	-
1,2-Dibromo-3-chloropropane	-	3.16E-06	c	3.20E-06	c	**0.0002**
1,2-Dibromoethane (EDB)	0.0001	6.53E-05	c	6.50E-05	c	**0.00005**
1,2-Dichlorobenzene	-	0.370141	n	2.80E-01	n	**0.6**
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	0.004272	c	4.20E-03	c	**0.075**
3,3´-Dichlorobenzidine	-	**0.001493**	c	1.10E-03	c	-
Dichlorodifluoromethane	**-**	**0.202778**	n	1.90E-01	n	-
1,1-Dichloroethane	**0.025**	0.024176	c	2.40E-02	c	-
1,2-Dichloroethane (EDC)	0.01	0.001493	c	1.50E-03	c*	**0.005**
1,1-Dichloroethene	**0.005**	0.339535	n	2.60E-01	n	0.007
2,4-Dichlorophenol	-	**0.1095**	n	3.50E-02	n	-
1,2-Dichloropropane	-	0.00386	c	3.80E-03	c*	**0.005**
2,2-Dichloropropane	-	-	-	-	-	-
1,3-Dichloropropane	-	-	-	**2.90E-01**	n	-
1,1-Dichloropropene	-	-	-	-	-	-
Diethyl phthalate	-	**29.2**	n	1.10E+01	n	-
Dimethyl phthalate	-	**365**	n	-	-	-
2,4-Dimethylphenol	-	**0.73**	n	2.70E-01	n	-
4,6-Dinitro-2-methylphenol	-	-	-	**1.20E-03**	n	-
2,4-Dinitrophenol	-	**0.073**	n	3.00E-02	n	-
2,4-Dinitrotoluene	-	**0.002168**	c	2.00E-03	c	-
2,6-Dinitrotoluene	-	**0.0365**	n	1.50E-02	n	-
Di-n-butyl phthalate	-	**3.65**	n	6.70E-01	n	-
Di-n-octyl phthalate	-	-	-	-	-	-
Ethylbenzene	0.75	0.014761	c	1.30E-02	c	**0.7**
Fluoranthene	-	**1.46**	n	6.30E-01	n	-
Fluorene	-	**1.46**	n	2.20E-01	n	-
Hexachlorobenzene	-	0.00042	c	4.20E-04	c	**0.001**
Hexachlorobutadiene	-	**0.008615**	c	2.60E-03	c*	-
Hexachlorocyclopentadiene	-	0.219	n	2.20E-02	n	**0.05**
Hexachloroethane	-	**0.0168**	c	7.90E-03	c**	-

Table 6
Groundwater Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

	NMED			EPA		
Analyte	NMED WQCC Standards (mg/L)	NMED Tap Water mg/L	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)
2-Hexanone	-	**0.876**	n	3.40E-02	n	-
Indeno(1,2,3-cd)pyrene	-	**0.000295**	c	2.90E-04	c	-
Iron, Total	**1**	25.55	n	1.10E+01	n	-
Isophorone	-	**0.707368**	c	6.70E-01	c*	-
Isopropylbenzene (Cumene)	-	**0.67907**	n	3.90E-01	n	-
4-Isopropyltoluene	-	-	-	-	-	-
Lead	0.05	-	-	-	L	**0.015**
Manganese	**0.2**	0.876	n	-	-	-
Mercury	**0.002**	0.000626	n	6.30E-04	n	**0.002**
Methyl tert-butyl ether (MTBE)	-	**0.124661**	c	1.20E-01	c	-
Methylene chloride	0.1	0.186383	n	9.90E-02	c**	**0.005**
1-Methylnaphthalene	-	-	-	**9.70E-03**	c	-
2-Methylnaphthalene	-	-	-	**2.70E-02**	n	-
2-Methylphenol	-	-	-	**7.20E-01**	n	-
3+4-Methylphenol	-	-	-	**-**	-	-
4-Methyl-2-pentanone	-	-	-	**1.00E+00**	n	-
Naphthalene	-	**0.001431**	c	1.40E-03	c*	-
n-Butylbenzene	-	-	-	**7.80E-01**	n	-
Nickel	**0.2**	0.73	n	3.00E+00	n	-
2-Nitroaniline	-	-	-	**1.50E-01**	n	-
3-Nitroaniline	-	-	-	-	-	-
4-Nitroaniline	-	-	-	**3.30E-02**	c*	-
2-Nitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
Nitrobenzene	-	**0.001217**	c	1.20E-03	c*	-
N-Nitrosodimethylamine	-	**4.22E-06**	c	4.20E-06	c	
N-Nitrosodi-n-propylamine	-	-	-	**9.30E-05**	c	-
N-Nitrosodiphenylamine	-	**0.137143**	c	1.00E-01	c	-
n-Propylbenzene	-	-	-	**5.30E-01**	n	-
Pentachlorophenol	-	**0.00168**	c	3.50E-04	c	**0.001**
Phenanthrene	-	**1.095**	n	-	-	-
Phenol	**0.005**	10.95	n	4.50E+00	n	-
Pyrene	-	**1.095**	n	8.70E-02	n	-
Pyridine	-	-	-	**1.50E-02**	n	-
sec-Butylbenzene	-	-	-	-	-	-
Selenium	**0.05**	0.1825	n	7.80E-02	n	**0.05**
Silver	**0.05**	0.1825	n	7.10E-02	n	-
Styrene	-	1.622222	n	1.10E+00	n	**0.1**
tert-Butylbenzene	-	-	-	-	-	-
Tetrachloroethene (PCE)	0.02	0.001081	c	9.70E-02	c**	**0.005**
1,1,1,2-Tetrachloroethane	-	**0.005242**	c	5.00E-03	c	-
Toluene	**0.75**	2.28125	n	8.60E-01	n	1
1,2,3-Trichlorobenzene	-	-	-	**5.20E-02**	n	-
1,2,4-Trichlorobenzene	-	0.004124	n	9.90E-03	c**	**0.07**

Table 6
Groundwater Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

	NMED			EPA		
Analyte	NMED WQCC Standards (mg/L)	NMED Tap Water mg/L	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)
2,4,5-Trichlorophenol	-	**3.65**	n	8.90E-01	n	-
2,4,6-Trichlorophenol	-	**0.0365**	n	3.50E-02	c**	-
1,2,3-Trichloropropane	-	**7.18E-06**	c	6.50E-06	c	-
1,2,4-Trimethylbenzene	-	-	-	**1.50E-02**	n	-
1,1,1-Trichloroethane	**0.06**	9.125	n	7.50E+00	n	0.2
1,1,2,2-Tetrachloroethane	**0.02**	0.000671	c	6.60E-04	c	-
1,1,2-Trichloroethane	0.1	0.000416	n	2.40E-03	c**	**0.005**
Trichloroethene (TCE)	0.1	0.003395	n	4.40E-03	c**	**0.005**
Trichlorofluoromethane	-	**1.288235**	n	1.10E+00	n	-
1,3,5-Trimethylbenzene	-	-	-	**8.70E-02**	n	-
Vanadium	-	**0.1825**	n	7.80E-02	n	-
Vinyl chloride	**0.001**	0.000162	c	1.50E-04	c	0.002
Xylenes, Total	**0.62**	0.202778	n	1.90E-01	n	10
Zinc	**10**	10.95	n	4.70E+00	n	-
General Chemistry	-					
Chloride	-	-	-	-	-	-
Fluoride	**1.6**	1.46	n	0.93	n	-
Sulfate	-	-	-	-	-	-
Total Dissolved Solids	-	-	-	-	-	-
Diesel Range Organics (DRO)	-	-	-	-	-	-
Gasoline Range Organics (GRO)	-	-	-	-	-	-
Motor Oil Range Organics (MRO)	-	-	-	-	-	-

c - cancer, * = where n SL < 100X c SL, ** = where n SL < 10X c SL
n - noncancer
620 - Bolded value is applicable screening level

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EPA - Regional Screening Levels (November 2012); carcs multiplied by 10
NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-1 (10-12')	SWMU 1-1 (13-14')	SWMU 1-1 (2-4')	SWMU 1-2 (10-11')	SWMU 1-2 (14-16')	SWMU 1-2 (17-17.25')	SWMU 1-2 (19.5-20')	SWMU 1-2 (6-8')	SWMU 1-3 (10-11')	SWMU 1-3 (11-11.25')	SWMU 1-3 (18.5-19.5')	SWMU 1-3 (19.5-20')	SWMU 1-3 (2-4')	SWMU 1-4 (10-12')	SWMU 1-4 (17-18')
										1210372-002	1210372-003	1210372-001	1210279-002	1210279-003	1210279-004	1210279-005	1210279-001	1210279-009	1210279-010	1210279-011	1210279-012	1210279-008	1210332-007	1210332-002
										10/5/2012	10/5/2012	10/5/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/3/2012	10/3/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(7)	3.13E+01	-	mg/Kg	<12.5	<25	<12.5	<4.9996	<4.9997	<5	<5	<5.0001	<5	<5	<5	<5	<2.5	<12.5	<12.5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(7)	3.90E+00	-	mg/Kg	<3.1	<6.6	<3.1	<1.3	<1.3	<1.3	3.1J	<1.3	2.1J	1.9J	<1.3	<1.3	<13	<3.1	<3.1
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(7)	4.35E+03	-	mg/Kg	300	630	450	220	680	180	1300	39	220	110	270	400	770	360	370
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(7)	1.44E+02	-	mg/Kg	1.2	<1.5	<0.75	0.74	0.58	0.74	0.77	0.61	0.72	0.63	0.79	0.83	0.39	<0.75	<0.75
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(7)	7.03E+01	-	mg/Kg	<0.5	<1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.5	<0.5
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(7)	1.17E+05	-	mg/Kg	16	6.8	400	6	6.3	6.9	12	8.1	7.6	4.8	9.3	10	3.8	3.7	7.9
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(7)	2.97E+00	-	mg/Kg	16	6.8	400	6	6.3	6.9	12	8.1	7.6	4.8	9.3	10	3.8	3.7	7.9
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	mg/Kg	7.5	8	8.1	3.3	3.5	3.8	11	3.9	3.6	3.2	5.4	5.7	2.4	2	3.9
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(7)	4.69E+01	-	mg/Kg	<0.3	<0.3	1.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	1.6
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(7)	5.48E+04	-	mg/Kg	23000	8100	16000	11000	12000	12000	17000	12000	11000	10000	16000	16000	4800	5300	10000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	mg/Kg	3.3	<2.5	80	3.9	3.5	4.8	3.9	3.5	3.4	4	4.8	2.8	<0.25	3.1	2.7
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(7)	4.40E+02	-	mg/Kg	290	2800	480	310	360	280	1200	230	420	380	510	610	340	550	570
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(7)	1.36E+01	-	mg/Kg	<0.033	<0.033	1.4	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(7)	1.56E+03	-	mg/Kg	15	8.3	15	5.6	5.7	6.7	16	6	5.7	5	10	12	3.8	2.9	6
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(7)	3.91E+02	-	mg/Kg	<12.5	<25	<12.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<2.5	<12.5	<12.5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(7)	3.91E+02	-	mg/Kg	<1.25	<2.5	<1.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<1.25	<1.25
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(7)	3.91E+02	-	mg/Kg	25	30	20	12	13	12	14	16	15	10	11	10	11	<12.5	17
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(7)	2.35E+04	-	mg/Kg	29	<25	720	13	13	13	30	16	11	10	15	16	9.1	<12.5	17
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(7)	7.59E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(7)	1.34E+03	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(7)	9.82E-02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(7)	5.14E-02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(7)	2.75E+00	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(7)	5.36E+01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,1-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(7)	1.15E-03	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	mg/Kg	<0.5	<0.05	17	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	0.00132	0.00128	<0.0011	0.25
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(7)	5.07E-04	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(7)	7.10E-03	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(7)	1.64E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(7)	4.94E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	mg/Kg	<0.5	<0.05	5.8	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	0.073
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	6.4	<0.2	35	<0.0046	<0.0048	<0.0047	<0.0042	<0.2	<0.0049	<0.0043	<0.0052	<0.0048	<0.0042	<0.0045	0.55
2,2-Dichloropropane	-	-	-	-	-	-	-	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(7)	5.87E+02	-	mg/Kg	<5	<0.5	<25	<0.0116	<0.0121	<0.0116	<0.0104	<0.5	<0.0123	<0.0108	<0.0129	<0.012	<0.0105	<0.0113	<0.5
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(7)	2.57E+02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(7)	9.38E+02	-	mg/Kg	<5	<0.5	<25	<0.0116	<0.0121	<0.0116	<0.0104	<0.5	<0.0123	<0.0108	<0.0129	<0.012	<0.0105	<0.0113	<0.5
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	13	<0.2	48	<0.0046	<0.0048	<0.0047	<0.0042	<0.2	<0.0049	<0.0043	<0.0052	<0.0048	<0.0042	<0.0045	0.93
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
4-Isopropyltoluene	-	-	-	-	-	-	-	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	mg/Kg	<5	<0.5	<25	<0.0116	<0.0121	<0.0116	<0.0104	<0.5	<0.0123	<0.0108	<0.0129	<0.012	<0.0105	<0.0113	<0.5
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(7)	1.78E+03	-	mg/Kg	<7.5	<0.75	<37.5	0.0135	0.0158	0.0877	0.0127	<0.75	0.019	0.0469	<0.0129	<0.012	0.0418	0.0153	<0.75
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(7)	7.96E-01	-	mg/Kg	<0.5	<0.05	3.2	<0.0012	0.00194	0.00139	0.00395	<0.05	<0.0012	<0.0011	0.00269	0.00855	<0.001	<0.0011	<0.05
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-1 (10-12')	SWMU 1-1 (13-14')	SWMU 1-1 (2-4')	SWMU 1-2 (10-11')	SWMU 1-2 (14-16')	SWMU 1-2 (17-17.25')	SWMU 1-2 (19.5-20')	SWMU 1-2 (6-8')	SWMU 1-3 (10-11')	SWMU 1-3 (11-11.25')	SWMU 1-3 (18.5-19.5')	SWMU 1-3 (19.5-20')	SWMU 1-3 (2-4')	SWMU 1-4 (10-12')	SWMU 1-4 (17-18')
										1210372-002	1210372-003	1210372-001	1210279-002	1210279-003	1210279-004	1210279-005	1210279-001	1210279-009	1210279-010	1210279-011	1210279-012	1210279-008	1210332-007	1210332-002
										10/5/2012	10/5/2012	10/5/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/3/2012	10/3/2012
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(7)	1.25E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(7)	2.78E+02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(7)	8.86E-01	-	mg/Kg	<1.5	<0.15	<7.5	<0.0012	<0.0012	<0.0012	<0.001	<0.15	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.15
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(7)	1.30E+02	-	mg/Kg	<5	<0.5	<25	<0.0116	<0.0121	<0.0116	<0.0104	<0.5	<0.0123	<0.0108	<0.0129	<0.012	<0.0105	<0.0113	<0.5
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(7)	7.39E-01	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(7)	2.27E+01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(7)	2.48E+03	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(7)	2.12E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(7)	2.03E+01	-	mg/Kg	<1.5	<0.15	<7.5	<0.0012	<0.0012	<0.0012	<0.001	<0.15	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.15
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(7)	8.47E+00	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(7)	5.71E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(7)	1.52E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(7)	7.89E-01	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(7)	1.49E+02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(7)	5.98E+00	-	mg/Kg	<0.5	<0.05	5.8	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	0.00125	<0.001	<0.0011	0.05
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<1	<0.1	<5	<0.0012	<0.0012	<0.0012	<0.001	<0.1	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.1
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(7)	3.99E+02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(7)	1.11E+01	-	mg/Kg	<0.5	<0.05	<2.5	0.00148	0.00518	0.00412	<0.001	<0.05	<0.0012	0.00115	0.00256	<0.0012	<0.001	<0.0011	<0.05
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(7)	1.90E+01	-	mg/Kg	<1.5	<0.15	<7.5	<0.0035	<0.0036	<0.0035	<0.0031	<0.15	<0.0037	<0.0033	<0.0039	<0.0036	<0.0031	<0.0034	<0.15
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	1.3	<0.1	13	<0.0023	<0.0024	<0.0023	<0.0021	<0.1	<0.0025	<0.0022	<0.0026	<0.0024	<0.0021	<0.0023	0.4
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	mg/Kg	<1.5	<0.15	<7.5	<0.0012	<0.0012	<0.0012	<0.001	<0.15	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.15
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	mg/Kg	<0.5	<0.05	2.8	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
sec-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(7)	6.40E+02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
tert-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(7)	1.98E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(7)	5.84E+02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	0.00151	<0.0012	0.00333	<0.05	<0.0012	<0.0011	0.00164	0.005	0.00187	<0.0011	<0.05
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(7)	1.24E+01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(7)	4.85E-01	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(7)	4.10E+02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(7)	2.50E-02	-	mg/Kg	<0.5	<0.05	<2.5	<0.0012	<0.0012	<0.0012	<0.001	<0.05	<0.0012	<0.0011	<0.0013	<0.0012	<0.001	<0.0011	<0.05
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(7)	7.21E+01	-	mg/Kg	<1	<0.1	24	<0.0023	<0.0024	<0.0023	0.00212	<0.1	<0.0025	<0.0022	<0.0026	0.00344	<0.0021	<0.0023	0.35
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	7.9	<0.1987	43	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(7)	4.78E+03	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(7)	4.78E+01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(7)	4.60E+01	-	mg/Kg	<0.4016	<0.3975	<2.006	<0.3995	<0.3962	<0.3989	<0.4009	<0.4025	<0.4079	<0.3987	<0.3956	<0.4031	<0.4013	<0.8	<0.4012
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(7)	3.07E+02	-	mg/Kg	<0.3012	<0.2981	<1.5045	<0.2996	<0.2971	<0.2992	<0.3007	<0.3019	<0.3059	<0.299	<0.2967	<0.3023	<0.301	<0.6	0.64
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(7)	2.91E+01	-	mg/Kg	<0.4016	<0.3975	<2.006	<0.3995	<0.3962	<0.3989	<0.4009	<0.4025	<0.4079	<0.3987	<0.3956	<0.4031	<0.4013	<0.8	<0.4012
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(7)	1.04E+00	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(7)	1.77E+01	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(7)	4.01E-01	-	mg/Kg	<0.251	<0.2484	<1.2538	<0.2497	<0.2476	<0.2493	<0.2506	<0.2516	<0.2549	<0.2492	<0.2473	<0.2519	<0.2508	<0.5	<0.2508
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(7)	5.33E+01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	14	<0.1987	55	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	0.27
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
2-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-1 (10-12')	SWMU 1-1 (13-14')	SWMU 1-1 (2-4')	SWMU 1-2 (10-11')	SWMU 1-2 (14-16')	SWMU 1-2 (17-17.25')	SWMU 1-2 (19.5-20')	SWMU 1-2 (6-8')	SWMU 1-3 (10-11')	SWMU 1-3 (11-11.25')	SWMU 1-3 (18.5-19.5')	SWMU 1-3 (19.5-20')	SWMU 1-3 (2-4')	SWMU 1-4 (10-12')	SWMU 1-4 (17-18')
										1210372-002	1210372-003	1210372-001	1210279-002	1210279-003	1210279-004	1210279-005	1210279-001	1210279-009	1210279-010	1210279-011	1210279-012	1210279-008	1210332-007	1210332-002
										10/5/2012	10/5/2012	10/5/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/3/2012	10/3/2012
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(7)	3.41E+00	-	mg/Kg	<0.251	<0.2484	<1.2538	<0.2497	<0.2476	<0.2493	<0.2506	<0.2516	<0.2549	<0.2492	<0.2473	<0.2519	<0.2508	<0.5	<0.2508
3+4-Methylphenol	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
3-Nitroaniline	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
4-Chloroaniline	2.40E+01	(3)	8.60E+01	(6)	5.99E-02	(8)	5.99E-02	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
4-Nitroaniline	2.40E+02	(3)	8.60E+02	(6)	6.45E-01	(8)	6.45E-01	-	mg/Kg	<0.4016	<0.3975	<2.006	<0.3995	<0.3962	<0.3989	<0.4009	<0.4025	<0.4079	<0.3987	<0.3956	<0.4031	<0.4013	<0.8	<0.4012
4-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.251	<0.2484	<1.2538	<0.2497	<0.2476	<0.2493	<0.2506	<0.2516	<0.2549	<0.2492	<0.2473	<0.2519	<0.2508	<0.5	<0.2508
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(7)	3.44E+03	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Acenaphthylene	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Aniline	8.50E+02	(3)	3.00E+03	(6)	1.80E+00	(8)	1.80E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(7)	1.72E+04	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Azobenzene	5.10E+01	(3)	2.30E+02	(6)	3.69E-01	(8)	3.69E-01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(7)	1.48E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(7)	1.48E-01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(7)	1.48E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(7)	1.48E+01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(7)	1.21E-02	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(7)	1.07E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(7)	3.47E+02	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+03	(6)	9.22E+01	(8)	9.22E+01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Carbazole	-	-	-	-	-	-	-	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(7)	1.48E+02	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(7)	1.48E-01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(7)	4.45E+03	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(7)	3.71E+04	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(7)	3.21E+03	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	mg/Kg	<0.251	<0.2484	<1.2538	<0.2497	<0.2476	<0.2493	<0.2506	<0.2516	<0.2549	<0.2492	<0.2473	<0.2519	<0.2508	<0.5	<0.2508
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(7)	2.29E+03	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(7)	2.29E+03	-	mg/Kg	0.68	<0.1987	3.7	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(7)	1.83E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(7)	2.43E+02	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(7)	3.77E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(7)	1.48E+00	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(7)	8.84E+01	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	1.1	<0.1987	7.9	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(7)	2.88E-01	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E+00	(6)	3.23E-03	(8)	3.23E-03	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(7)	2.61E+02	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(7)	5.90E+00	-	mg/Kg	<0.4016	<0.3975	<2.006	<0.3995	<0.3962	<0.3989	<0.4009	<0.4025	<0.4079	<0.3987	<0.3956	<0.4031	<0.4013	<0.8	<0.4012
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(7)	1.83E+03	-	mg/Kg	1.5	<0.1987	11	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(7)	2.29E+03	-	mg/Kg	<0.2008	<0.1987	<1.003	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(7)	1.72E+03	-	mg/Kg	<0.2008	<0.1987	1.5	<0.1997	<0.1981	<0.1995	<0.2005	<0.2013	<0.2039	<0.1993	<0.1978	<0.2015	<0.2007	<0.4	<0.2006
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	mg/Kg	<0.502	<0.4969	<2.5075	<0.4993	<0.4952	<0.4987	<0.5012	<0.5032	<0.5099	<0.4983	<0.4946	<0.5039	<0.5017	<1	<0.5015

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-1 (10-12')	SWMU 1-1 (13-14')	SWMU 1-1 (2-4')	SWMU 1-2 (10-11')	SWMU 1-2 (14-16')	SWMU 1-2 (17-17.25')	SWMU 1-2 (19.5-20')	SWMU 1-2 (6-8')	SWMU 1-3 (10-11')	SWMU 1-3 (11-11.25')	SWMU 1-3 (18.5-19.5')	SWMU 1-3 (19.5-20')	SWMU 1-3 (2-4')	SWMU 1-4 (10-12')	SWMU 1-4 (17-18')
										1210372-002	1210372-003	1210372-001	1210279-002	1210279-003	1210279-004	1210279-005	1210279-001	1210279-009	1210279-010	1210279-011	1210279-012	1210279-008	1210332-007	1210332-002
										10/5/2012	10/5/2012	10/5/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/2/2012	10/3/2012	10/3/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	820	55	4700	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<16	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<25	<5	410	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	13
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<510	<51	<5045	<52	<50	<48	<50	<49	<48	<50	<49	<50	<51	<82	<51

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (May 2012)

(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-4 (23-24')	SWMU 1-4 (8-10')	SWMU 1-5 (10-12')	SWMU 1-5 (14-16')	SWMU 1-5 (16-18')	SWMU 1-5 (24-25')	SWMU 1-5 (26-27')	SWMU 1-5 (27-28')	SWMU 1-6 (10-11')	SWMU 1-6 (11-12')	SWMU 1-6 (2-4')	SWMU 1-6 (4-6')	SWMU 1-6 (7.5-8')	SWMU 1-7 (12-14')	SWMU 1-7 (14-16')
										1210332-003	1210332-006	1210332-012	1210332-013	1210332-014	1210332-015	1210332-008	1210332-009	1210372-016	1210372-017	1210372-020	1210372-022	1210372-023	1210372-018	1210372-019
										10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(7)	3.13E+01	-	mg/Kg	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<2.5	<12.5	<12.5	<12.5	<25	<12.5	<12.5	<12.5	<12.5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(7)	3.90E+00	-	mg/Kg	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<0.63	<3.1	<3.1	<3.1	<6.3	<3.1	**4.6J**	<3.1	<3.1
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(7)	4.35E+03	-	mg/Kg	200	590	610	640	690	630	230	380	380	700	660	870	110	87	290
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(7)	1.44E+02	-	mg/Kg	1.1	<0.75	<0.75	<0.75	<0.75	<0.75	0.3	1.1	<0.75	0.96	<1.5	<0.75	0.83	1.1	0.95
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(7)	7.03E+01	-	mg/Kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(7)	1.17E+05	-	mg/Kg	14	7.9	11	11	7.9	7.7	5.1	15	7.2	14	6.1	7	8.3	12	11
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(7)	2.97E+00	-	mg/Kg	14	7.9	11	11	7.9	7.7	5.1	15	7.2	14	6.1	7	8.3	12	11
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	mg/Kg	5.9	4	3.3	3.9	3.7	3.5	2.1	7.8	3.8	6.2	3.5	5.7	4.1	5.4	6
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(7)	4.69E+01	-	mg/Kg	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(7)	5.48E+04	-	mg/Kg	18000	11000	9200	11000	15000	8700	5900	17000	11000	18000	9600	9500	13000	16000	15000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	mg/Kg	2.1	4.2	3.9	4.4	7.7	3.5	0.57	<1.25	3.6	<1.25	5.4	5.6	4.1	4	3.3
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(7)	4.40E+02	-	mg/Kg	340	720	1300	1200	1400	1200	200	640	750	480	1000	1100	390	360	790
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(7)	1.36E+01	-	mg/Kg	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(7)	1.56E+03	-	mg/Kg	12	6.3	4.5	5.9	5.1	4.9	3.5	12	5.5	12	<5	5.2	6.7	9.3	9.7
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(7)	3.91E+02	-	mg/Kg	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<2.5	<12.5	<12.5	<12.5	<25	<12.5	<12.5	<12.5	<12.5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(7)	3.91E+02	-	mg/Kg	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<0.25	<1.25	<1.25	<1.25	<2.5	<1.25	<1.25	<1.25	<1.25
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(7)	3.91E+02	-	mg/Kg	15	16	15	19	34	14	8.6	22	16	16	<25	16	14	20	16
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(7)	2.35E+04	-	mg/Kg	26	16	<12.5	14	<12.5	<12.5	8.5	31	13	25	<25	15	14	18	18
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(7)	7.59E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(7)	1.34E+03	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(7)	9.82E-02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(7)	5.14E-02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(7)	2.75E+00	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(7)	5.36E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,1-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(7)	1.15E-03	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(7)	5.07E-04	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(7)	7.10E-03	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(7)	1.64E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(7)	4.94E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.0037	<0.0036	<0.0036	<0.0038	<0.0042	<0.0041	<0.004	<0.004	<0.0043	<0.0055	<0.0043	<0.0041	<0.0049	<0.0047	<0.0058
2,2-Dichloropropane	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(7)	5.87E+02	-	mg/Kg	<0.0092	<0.0091	0.0142	0.0179	<0.0104	<0.0104	<0.0101	<0.01	<0.0107	<0.0136	<0.0107	<0.0103	<0.0123	<0.0119	<0.0145
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(7)	2.57E+02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(7)	9.38E+02	-	mg/Kg	<0.0092	<0.0091	<0.0091	<0.0095	<0.0104	<0.0104	<0.0101	<0.01	<0.0107	<0.0136	<0.0107	<0.0103	<0.0123	<0.0119	<0.0145
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.0037	<0.0036	<0.0036	<0.0038	<0.0042	<0.0041	<0.004	<0.004	<0.0043	<0.0055	<0.0043	<0.0041	<0.0049	<0.0047	<0.0058
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
4-Isopropyltoluene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	mg/Kg	<0.0092	<0.0091	<0.0091	<0.0095	<0.0104	<0.0104	<0.0101	<0.01	<0.0107	<0.0136	<0.0107	<0.0103	<0.0123	<0.0119	<0.0145
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(7)	1.78E+03	-	mg/Kg	0.0173	0.0314	0.0614	0.0891	0.0379	0.0485	0.0233	<0.01	0.0539	<0.0136	0.477	0.0625	<0.0123	0.0138	<0.0145
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(7)	7.96E-01	-	mg/Kg	0.00566	<0.0009	<0.0009	<0.0009	<0.001	0.00403	0.00594	0.00158	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-4 (23-24')	SWMU 1-4 (8-10')	SWMU 1-5 (10-12')	SWMU 1-5 (14-16')	SWMU 1-5 (16-18')	SWMU 1-5 (24-25')	SWMU 1-5 (26-27')	SWMU 1-5 (27-28')	SWMU 1-6 (10-11')	SWMU 1-6 (11-12')	SWMU 1-6 (2-4')	SWMU 1-6 (4-6')	SWMU 1-6 (7.5-8')	SWMU 1-7 (12-14')	SWMU 1-7 (14-16')
										1210332-003	1210332-006	1210332-012	1210332-013	1210332-014	1210332-015	1210332-008	1210332-009	1210372-016	1210372-017	1210372-020	1210372-022	1210372-023	1210372-018	1210372-019
										10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(7)	1.25E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(7)	2.78E+02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(7)	8.86E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(7)	1.30E+02	-	mg/Kg	<0.0092	<0.0091	<0.0091	<0.0095	<0.0104	<0.0104	<0.0101	<0.01	<0.0107	<0.0136	<0.0107	<0.0103	<0.0123	<0.0119	<0.0145
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(7)	7.39E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(7)	2.27E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(7)	2.48E+03	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(7)	2.12E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(7)	2.03E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(7)	8.47E+00	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(7)	5.71E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(7)	1.52E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(7)	7.89E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(7)	1.49E+02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(7)	5.98E+00	-	mg/Kg	0.00125	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	0.00563	<0.001	<0.0012	<0.0012	<0.0015
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(7)	3.99E+02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(7)	1.11E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	0.0019
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(7)	1.90E+01	-	mg/Kg	<0.0027	<0.0027	<0.0027	<0.0028	<0.0031	<0.0031	<0.003	<0.003	<0.0032	<0.0041	<0.0032	<0.0031	<0.0037	<0.0036	<0.0044
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.0018	<0.0018	<0.0018	<0.0019	<0.0021	<0.0021	<0.002	<0.002	<0.0021	<0.0027	<0.0021	<0.0021	<0.0025	<0.0024	<0.0029
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
sec-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(7)	6.40E+02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
tert-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(7)	1.98E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(7)	5.84E+02	-	mg/Kg	0.00275	<0.0009	<0.0009	<0.0009	<0.001	0.0091	0.00831	0.00101	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(7)	1.24E+01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(7)	4.85E-01	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(7)	4.10E+02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(7)	2.50E-02	-	mg/Kg	<0.0009	<0.0009	<0.0009	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0011	<0.0014	<0.0011	<0.001	<0.0012	<0.0012	<0.0015
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(7)	7.21E+01	-	mg/Kg	0.00218	<0.0018	<0.0018	<0.0019	<0.0021	<0.0021	<0.002	<0.002	<0.0021	<0.0027	0.0431	<0.0021	<0.0025	<0.0024	<0.0029
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(7)	4.78E+03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(7)	4.78E+01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(7)	4.60E+01	-	mg/Kg	<0.3971	<0.4013	<0.4038	<0.4	<0.3985	<0.4013	<0.7895	<0.3981	<0.3997	<0.4013	<0.3992	<0.4023	<0.397	<0.4021	<0.4044
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(7)	3.07E+02	-	mg/Kg	<0.2978	<0.301	<0.3028	<0.3	<0.2989	<0.301	<0.5921	<0.2986	<0.2998	<0.301	<0.2994	<0.3017	<0.2977	<0.3016	<0.3033
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(7)	2.91E+01	-	mg/Kg	<0.3971	<0.4013	<0.4038	<0.4	<0.3985	<0.4013	<0.7895	<0.3981	<0.3997	<0.4013	<0.3992	<0.4023	<0.397	<0.4021	<0.4044
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(7)	1.04E+00	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(7)	1.77E+01	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(7)	4.01E-01	-	mg/Kg	<0.2482	<0.2508	<0.2524	<0.25	<0.2491	<0.2508	<0.4934	<0.2488	<0.2498	<0.2508	<0.2495	<0.2514	<0.2481	<0.2513	<0.2528
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(7)	5.33E+01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
2-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022

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Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-4 (23-24')	SWMU 1-4 (8-10')	SWMU 1-5 (10-12')	SWMU 1-5 (14-16')	SWMU 1-5 (16-18')	SWMU 1-5 (24-25')	SWMU 1-5 (26-27')	SWMU 1-5 (27-28')	SWMU 1-6 (10-11')	SWMU 1-6 (11-12')	SWMU 1-6 (2-4')	SWMU 1-6 (4-6')	SWMU 1-6 (7.5-8')	SWMU 1-7 (12-14')	SWMU 1-7 (14-16')
										1210332-003	1210332-006	1210332-012	1210332-013	1210332-014	1210332-015	1210332-008	1210332-009	1210372-016	1210372-017	1210372-020	1210372-022	1210372-023	1210372-018	1210372-019
										10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(7)	3.41E+00	-	mg/Kg	<0.2482	<0.2508	<0.2524	<0.25	<0.2491	<0.2508	<0.4934	<0.2488	<0.2498	<0.2508	<0.2495	<0.2514	<0.2481	<0.2513	<0.2528
3+4-Methylphenol	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
3-Nitroaniline	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
4-Chloroaniline	2.40E+01	(3)	8.60E+01	(6)	5.99E-02	(8)	5.99E-02	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
4-Nitroaniline	2.40E+02	(3)	8.60E+02	(6)	6.45E-01	(8)	6.45E-01	-	mg/Kg	<0.3971	<0.4013	<0.4038	<0.4	<0.3985	<0.4013	<0.7895	<0.3981	<0.3997	<0.4013	<0.3992	<0.4023	<0.397	<0.4021	<0.4044
4-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.2482	<0.2508	<0.2524	<0.25	<0.2491	<0.2508	<0.4934	<0.2488	<0.2498	<0.2508	<0.2495	<0.2514	<0.2481	<0.2513	<0.2528
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(7)	3.44E+03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Acenaphthylene	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Aniline	8.50E+02	(3)	3.00E+03	(6)	1.80E+00	(8)	1.80E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(7)	1.72E+04	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Azobenzene	5.10E+01	(3)	2.30E+02	(6)	3.69E-01	(8)	3.69E-01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(7)	1.48E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(7)	1.48E-01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(7)	1.48E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(7)	1.48E+01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(7)	1.21E-02	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(7)	1.07E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(7)	3.47E+02	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+03	(6)	9.22E+01	(8)	9.22E+01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Carbazole	-	-	-	-	-	-	-	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(7)	1.48E+02	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(7)	1.48E-01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(7)	4.45E+03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(7)	3.71E+04	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(7)	3.21E+03	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	mg/Kg	<0.2482	<0.2508	<0.2524	<0.25	<0.2491	<0.2508	<0.4934	<0.2488	<0.2498	<0.2508	<0.2495	<0.2514	<0.2481	<0.2513	<0.2528
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(7)	2.29E+03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(7)	2.29E+03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(7)	1.83E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(7)	2.43E+02	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(7)	3.77E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(7)	1.48E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(7)	8.84E+01	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(7)	2.88E-01	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E+00	(6)	3.23E-03	(8)	3.23E-03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(7)	2.61E+02	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(7)	5.90E+00	-	mg/Kg	<0.3971	<0.4013	<0.4038	<0.4	<0.3985	<0.4013	<0.7895	<0.3981	<0.3997	<0.4013	<0.3992	<0.4023	<0.397	<0.4021	<0.4044
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(7)	1.83E+03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(7)	2.29E+03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(7)	1.72E+03	-	mg/Kg	<0.1985	<0.2007	<0.2019	<0.2	<0.1993	<0.2007	<0.3947	<0.1991	<0.1999	<0.2007	<0.1996	<0.2011	<0.1985	<0.2011	<0.2022
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	mg/Kg	<0.4964	<0.5017	<0.5047	<0.5	<0.4982	<0.5017	<0.9868	<0.4977	<0.4997	<0.5017	<0.499	<0.5028	<0.4962	<0.5027	<0.5056

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-4 (23-24')	SWMU 1-4 (8-10')	SWMU 1-5 (10-12')	SWMU 1-5 (14-16')	SWMU 1-5 (16-18')	SWMU 1-5 (24-25')	SWMU 1-5 (26-27')	SWMU 1-5 (27-28')	SWMU 1-6 (10-11')	SWMU 1-6 (11-12')	SWMU 1-6 (2-4')	SWMU 1-6 (4-6')	SWMU 1-6 (7.5-8')	SWMU 1-7 (12-14')	SWMU 1-7 (14-16')
										1210332-003	1210332-006	1210332-012	1210332-013	1210332-014	1210332-015	1210332-008	1210332-009	1210372-016	1210372-017	1210372-020	1210372-022	1210372-023	1210372-018	1210372-019
										10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/3/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012	10/4/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	<10	<10	<10	<10	<10	<12	<10	<10	<10	<10	<10	<10	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<48	<50	<49	<48	<50	<50	<60	<50	<50	<50	<50	<49	<50	<50	<49

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (May 2012)

(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-7 (16-18')	SWMU 1-8 (10-12')	SWMU 1-8 (12-14')	SWMU 1-8 (16-18')	SWMU 1-8 (19-20')	SWMU 1-8 (4-6')	SWMU 1-9 (0-0.5')	SWMU 1-9 (1.5-2')	SWMU 1-10 (0-0.5')	SWMU 1-10 (1.5-2')	SWMU 1-11 (0-0.5')	SWMU 1-11 (1.5-2')	SWMU 1-12 (0.5-1')	SWMU 1-12 (0-0.5')	SWMU 1-13 (0-0.5')
										1210372-015	1210372-007	1210372-008	1210372-009	1210372-005	1210372-006	1210811-001	1210811-002	1210811-003	1210811-004	1210811-005	1210811-006	1210811-008	1210811-007	1210692-021
										10/4/2012	10/5/2012	10/5/2012	10/5/2012	10/5/2012	10/5/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/12/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(7)	3.13E+01	-	mg/Kg	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<4.9999	<5.0001	<5	<5.0004	<5.0004	<5.0002	<5.0004	<4.9995	<5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(7)	3.90E+00	-	mg/Kg	3.2J	<3.1	<3.1	<3.1	<3.1	<3.1	2.2J	<1.3	2.9J	3.3J	2.0J	2.8J	2.4J	2.6J	2.5J
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(7)	4.35E+03	-	mg/Kg	330	620	370	550	300	540	620	200	590	580	510	590	440	400	600
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(7)	1.44E+02	-	mg/Kg	1.1	<0.75	<0.75	<0.75	0.95	<0.75	0.71	0.84	0.65	0.54	0.77	0.61	0.76	0.95	0.56
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(7)	7.03E+01	-	mg/Kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(7)	1.17E+05	-	mg/Kg	15	21	10	6.9	14	5.3	24	8.7	24	15	15	12	14	15	11
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(7)	2.97E+00	-	mg/Kg	15	21	10	6.9	14	5.3	24	8.7	24	15	15	12	14	15	11
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	mg/Kg	6.4	6.6	4.1	4.4	8.2	3	5	4.3	5	4.2	5.4	4	4.9	5.4	3.6
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(7)	4.69E+01	-	mg/Kg	<0.3	0.61	0.4	<0.3	<0.3	<0.3	1.4	<0.285	1.8	0.4	0.72	1.7	1.2	<0.25	0.33
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(7)	5.48E+04	-	mg/Kg	22000	15000	8000	11000	19000	7900	12000	12000	14000	7400	14000	7400	13000	15000	13000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	mg/Kg	1.7	8.2	2	2.8	<1.25	3.4	7	2.7	9.1	3	3.5	1.4	1.6	1.6	3.5
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(7)	4.40E+02	-	mg/Kg	510	810	540	740	300	390	600	300	560	790	620	400	460	390	590
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(7)	1.36E+01	-	mg/Kg	<0.033	0.16	0.044	<0.033	<0.033	<0.033	0.18	<0.033	0.2	0.091	0.84	0.19	0.12	0.16	0.12
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(7)	1.56E+03	-	mg/Kg	13	16	6.8	6.1	12	4.5	15	7.1	14	11	8.8	7.1	8	9.9	6.3
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(7)	3.91E+02	-	mg/Kg	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<4.9999	<5.0001	<5	<5.0004	<5.0004	<5.0002	<5.0004	<4.9995	<5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(7)	3.91E+02	-	mg/Kg	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(7)	3.91E+02	-	mg/Kg	28	26	15	16	26	19	21	16	24	22	25	18	24	24	18
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(7)	2.35E+04	-	mg/Kg	25	60	18	14	29	<12.5	53	14	70	26	39	44	40	61	30
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(7)	7.59E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(7)	1.34E+03	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(7)	9.82E-02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(7)	5.14E-02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(7)	2.75E+00	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(7)	5.36E+01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,1-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(7)	1.15E-03	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	mg/Kg	<0.001	0.00358	<0.05	<0.0011	<0.0011	0.0102	<0.0008	<0.0008	0.00282	0.00143	0.00219	0.00449	0.00382	0.00394	0.0031
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(7)	5.07E-04	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(7)	7.10E-03	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(7)	1.64E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(7)	4.94E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	mg/Kg	<0.001	0.000978	<0.05	<0.0011	<0.0011	0.00249	<0.0008	<0.0008	0.00105	<0.0008	<0.001	0.00165	0.00149	0.00161	0.00111
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.0039	<0.0037	<0.2	<0.0044	<0.0044	0.0164	<0.0031	<0.0031	<0.0036	<0.0033	<0.0039	<0.0031	<0.0029	<0.0036	<0.0044
2,2-Dichloropropane	-	-	-	-	-	-	-	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(7)	5.87E+02	-	mg/Kg	<0.0098	<0.0093	<0.5	<0.0111	<0.0109	0.0177	<0.0077	<0.0077	<0.0089	<0.0083	0.0102	<0.0077	<0.0073	0.0132	<0.011
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(7)	2.57E+02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(7)	9.38E+02	-	mg/Kg	<0.0098	<0.0093	<0.5	<0.0111	<0.0109	<0.0081	<0.0077	<0.0077	<0.0089	<0.0083	<0.0098	<0.0077	<0.0073	<0.0089	<0.011
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.0039	<0.0037	<0.2	<0.0044	<0.0044	0.0168	<0.0031	<0.0031	<0.0036	<0.0033	<0.0039	<0.0031	<0.0029	<0.0036	<0.0044
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
4-Isopropyltoluene	-	-	-	-	-	-	-	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	mg/Kg	<0.0098	<0.0093	<0.5	<0.0111	<0.0109	<0.0081	<0.0077	<0.0077	<0.0089	<0.0083	<0.0098	<0.0077	<0.0073	<0.0089	<0.011
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(7)	1.78E+03	-	mg/Kg	0.00987	0.145	<0.75	0.0364	0.0272	0.114	0.0395	0.0326	0.146	0.0464	0.329	0.0686	0.0917	3.23	0.128
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(7)	7.96E-01	-	mg/Kg	0.00136	0.00119	<0.05	<0.0011	<0.0011	0.0024	0.00139	0.00193	0.00176	0.000934	0.00207	0.00131	0.00191	0.00232	0.00154
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-7 (16-18')	SWMU 1-8 (10-12')	SWMU 1-8 (12-14')	SWMU 1-8 (16-18')	SWMU 1-8 (19-20')	SWMU 1-8 (4-6')	SWMU 1-9 (0-0.5')	SWMU 1-9 (1.5-2')	SWMU 1-10 (0-0.5')	SWMU 1-10 (1.5-2')	SWMU 1-11 (0-0.5')	SWMU 1-11 (1.5-2')	SWMU 1-12 (0.5-1')	SWMU 1-12 (0-0.5')	SWMU 1-13 (0-0.5')
										1210372-015	1210372-007	1210372-008	1210372-009	1210372-005	1210372-006	1210811-001	1210811-002	1210811-003	1210811-004	1210811-005	1210811-006	1210811-008	1210811-007	1210692-021
										10/4/2012	10/5/2012	10/5/2012	10/5/2012	10/5/2012	10/5/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/12/2012
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(7)	1.25E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(7)	2.78E+02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(7)	8.86E-01	-	mg/Kg	<0.001	<0.0009	<0.15	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(7)	1.30E+02	-	mg/Kg	<0.0098	<0.0093	<0.5	<0.0111	<0.0109	<0.0081	<0.0077	<0.0077	<0.0089	<0.0083	<0.0098	<0.0077	<0.0073	<0.0089	<0.011
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(7)	7.39E-01	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(7)	2.27E+01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(7)	2.48E+03	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(7)	2.12E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(7)	2.03E+01	-	mg/Kg	<0.001	<0.0009	<0.15	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(7)	8.47E+00	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(7)	5.71E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(7)	1.52E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(7)	7.89E-01	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(7)	1.49E+02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(7)	5.98E+00	-	mg/Kg	<0.001	0.0047	<0.05	<0.0011	<0.0011	0.00249	<0.0008	<0.0008	0.00322	0.000992	0.00933	0.00229	0.00131	0.0233	0.00224
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.001	<0.0009	<0.1	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(7)	3.99E+02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	0.00144	<0.0011
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(7)	1.11E+01	-	mg/Kg	<0.001	<0.0009	<0.05	0.0241	<0.0011	0.0081	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(7)	1.90E+01	-	mg/Kg	<0.0029	<0.0028	<0.15	<0.0033	<0.0033	<0.0024	<0.0023	<0.0023	<0.0027	<0.0025	<0.0029	<0.0023	<0.0022	<0.0027	<0.0033
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.002	<0.0019	<0.1	<0.0022	<0.0022	0.0113	<0.0015	<0.0015	<0.0018	<0.0017	<0.002	<0.0015	<0.0015	<0.0018	<0.0022
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	mg/Kg	<0.001	<0.0009	<0.15	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	0.00136	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
sec-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(7)	6.40E+02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
tert-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(7)	1.98E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(7)	5.84E+02	-	mg/Kg	<0.001	0.00426	<0.05	<0.0011	<0.0011	0.00218	0.00215	0.00164	0.00562	0.00346	0.00414	0.00804	0.0047	0.00554	0.00597
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(7)	1.24E+01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(7)	4.85E-01	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(7)	4.10E+02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(7)	2.50E-02	-	mg/Kg	<0.001	<0.0009	<0.05	<0.0011	<0.0011	<0.0008	<0.0008	<0.0008	<0.0009	<0.0008	<0.001	<0.0008	<0.0007	<0.0009	<0.0011
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(7)	7.21E+01	-	mg/Kg	<0.002	0.0262	<0.1	<0.0022	<0.0022	0.0128	<0.0015	<0.0015	0.0189	0.00384	0.0565	0.00902	0.00699	0.186	0.0112
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(7)	4.78E+03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(7)	4.78E+01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(7)	4.60E+01	-	mg/Kg	<0.3991	<2.0053	<2.0074	<0.397	<0.4023	<0.3981	<4.0268	<0.3979	<1.9987	<4.0013	<0.7989	<0.8008	<0.7987	<0.8051	<0.8048
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(7)	3.07E+02	-	mg/Kg	<0.2993	<1.504	<1.5055	<0.2977	<0.3017	<0.2986	<3.0201	<0.2984	<1.499	<3.001	<0.5992	<0.6006	<0.599	<0.6038	<0.6036
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(7)	2.91E+01	-	mg/Kg	<0.3991	<2.0053	<2.0074	<0.397	<0.4023	<0.3981	<4.0268	<0.3979	<1.9987	<4.0013	<0.7989	<0.8008	<0.7987	<0.8051	<0.8048
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(7)	1.04E+00	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(7)	1.77E+01	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(7)	4.01E-01	-	mg/Kg	<0.2494	<1.2533	<1.2546	<0.2481	<0.2514	<0.2488	<2.5168	<0.2487	<1.2492	<2.5008	<0.4993	<0.5005	<0.4992	<0.5032	<0.503
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(7)	5.33E+01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
2-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-7 (16-18')	SWMU 1-8 (10-12')	SWMU 1-8 (12-14')	SWMU 1-8 (16-18')	SWMU 1-8 (19-20')	SWMU 1-8 (4-6')	SWMU 1-9 (0-0.5')	SWMU 1-9 (1.5-2')	SWMU 1-10 (0-0.5')	SWMU 1-10 (1.5-2')	SWMU 1-11 (0-0.5')	SWMU 1-11 (1.5-2')	SWMU 1-12 (0.5-1')	SWMU 1-12 (0-0.5')	SWMU 1-13 (0-0.5')
										1210372-015	1210372-007	1210372-008	1210372-009	1210372-005	1210372-006	1210811-001	1210811-002	1210811-003	1210811-004	1210811-005	1210811-006	1210811-008	1210811-007	1210692-021
										10/4/2012	10/5/2012	10/5/2012	10/5/2012	10/5/2012	10/5/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/12/2012
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(7)	3.41E+00	-	mg/Kg	<0.2494	<1.2533	<1.2546	<0.2481	<0.2514	<0.2488	<2.5168	<0.2487	<1.2492	<2.5008	<0.4993	<0.5005	<0.4992	<0.5032	<0.503
3+4-Methylphenol	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
3-Nitroaniline	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
4-Chloroaniline	2.40E+01	(3)	8.60E+01	(6)	5.99E-02	(8)	5.99E-02	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
4-Nitroaniline	2.40E+02	(3)	8.60E+02	(6)	6.45E-01	(8)	6.45E-01	-	mg/Kg	<0.3991	<2.0053	<2.0074	<0.397	<0.4023	<0.3981	<4.0268	<0.3979	<1.9987	<4.0013	<0.7989	<0.8008	<0.7987	<0.8051	<0.8048
4-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.2494	<1.2533	<1.2546	<0.2481	<0.2514	<0.2488	<2.5168	<0.2487	<1.2492	<2.5008	<0.4993	<0.5005	<0.4992	<0.5032	<0.503
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(7)	3.44E+03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Acenaphthylene	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Aniline	8.50E+02	(3)	3.00E+03	(6)	1.80E+00	(8)	1.80E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(7)	1.72E+04	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Azobenzene	5.10E+01	(3)	2.30E+02	(6)	3.69E-01	(8)	3.69E-01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(7)	1.48E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(7)	1.48E-01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(7)	1.48E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(7)	1.48E+01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(7)	1.21E-02	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(7)	1.07E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(7)	3.47E+02	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+03	(6)	9.22E+01	(8)	9.22E+01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Carbazole	-	-	-	-	-	-	-	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(7)	1.48E+02	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(7)	1.48E-01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(7)	4.45E+03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(7)	3.71E+04	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(7)	3.21E+03	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	mg/Kg	<0.2494	<1.2533	<1.2546	<0.2481	<0.2514	<0.2488	<4.0268	<0.3979	<1.9987	<4.0013	<0.7989	<0.8008	<0.7987	<0.8051	<0.8048
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(7)	2.29E+03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(7)	2.29E+03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(7)	1.83E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(7)	2.43E+02	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(7)	3.77E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(7)	1.48E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(7)	8.84E+01	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(7)	2.88E-01	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E+00	(6)	3.23E-03	(8)	3.23E-03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(7)	2.61E+02	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(7)	5.90E+00	-	mg/Kg	<0.3991	<2.0053	<2.0074	<0.397	<0.4023	<0.3981	<4.0268	<0.3979	<1.9987	<4.0013	<0.7989	<0.8008	<0.7987	<0.8051	<0.8048
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(7)	1.83E+03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(7)	2.29E+03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(7)	1.72E+03	-	mg/Kg	<0.1995	<1.0027	<1.0037	<0.1985	<0.2011	<0.1991	<2.0134	<0.1989	<0.9993	<2.0007	<0.3995	<0.4004	<0.3993	<0.4025	<0.4024
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	mg/Kg	<0.4988	<2.5067	<2.5092	<0.4962	<0.5028	<0.4977	<5.0336	<0.4973	<2.4983	<5.0017	<0.9987	<1.001	<0.9983	<1.0064	<1.006

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-7 (16-18')	SWMU 1-8 (10-12')	SWMU 1-8 (12-14')	SWMU 1-8 (16-18')	SWMU 1-8 (19-20')	SWMU 1-8 (4-6')	SWMU 1-9 (0-0.5')	SWMU 1-9 (1.5-2')	SWMU 1-10 (0-0.5')	SWMU 1-10 (1.5-2')	SWMU 1-11 (0-0.5')	SWMU 1-11 (1.5-2')	SWMU 1-12 (0.5-1')	SWMU 1-12 (0-0.5')	SWMU 1-13 (0-0.5')
										1210372-015	1210372-007	1210372-008	1210372-009	1210372-005	1210372-006	1210811-001	1210811-002	1210811-003	1210811-004	1210811-005	1210811-006	1210811-008	1210811-007	1210692-021
										10/4/2012	10/5/2012	10/5/2012	10/5/2012	10/5/2012	10/5/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/12/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	100	53	<10	<10	<10	<10	<10	45	42	87	120	190	200	77
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<49	280	<50	<50	<50	<52	280	<50	230	210	86	120	190	150	<51

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (May 2012)

(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-13 (1.5-2')	SWMU 1-13 (2-4')	SWMU 1-13 (4-6')	SWMU 1-14 (0-0.5')	SWMU 1-14 (1.5-2')	SWMU 1-15 (0-0.5')	SWMU 1-15 (1.5-2')	SWMU 1-16 (0-0.5')	SWMU 1-16 (1.5-2')	SWMU 1-17 (0-0.5')	SWMU 1-17 (1-1.5')	SWMU 1-18 (0-0.5')	SWMU 1-18 (1-1.5')	SWMU 1-19 (0-0.5')	SWMU 1-20 (0-0.5')
										1210692-022	1210692-023	1210692-024	1210811-009	1210811-010	1210811-012	1210811-013	1210811-014	1210811-015	1210811-016	1210811-017	1210858-001	1210858-002	1210858-003	1210692-001
										10/12/2012	10/12/2012	10/12/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/16/2012	10/16/2012	10/16/2012	10/11/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(7)	3.13E+01	-	mg/Kg	<5.0004	<4.9999	<4.9997	<4.9998	<12.5011	<12.501	<5.0002	<5.0002	<12.5	<5	<5	<5	<12.4993	<5	<5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(7)	3.90E+00	-	mg/Kg	<1.3	<1.3	<1.3	<1.3	<3.1	<3.1	<1.3	<1.3	<3.1	**4.7J**	<1.3	**4.9J**	<3.1	1.6J	2.6J
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(7)	4.35E+03	-	mg/Kg	310	250	120	530	360	360	240	640	290	500	310	700	340	530	740
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(7)	1.44E+02	-	mg/Kg	0.74	0.6	0.71	1	0.75	0.75	0.79	0.46	<0.7499	0.67	0.78	0.35	<0.75	0.68	0.71
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(7)	7.03E+01	-	mg/Kg	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(7)	1.17E+05	-	mg/Kg	7.1	22	7.8	11	11	10	11	3.9	9.9	6.6	8.8	3.4	9.2	13	19
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(7)	2.97E+00	-	mg/Kg	7.1	22	7.8	11	11	10	11	3.9	9.9	6.6	8.8	3.4	9.2	13	19
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	mg/Kg	3.8	4.3	4.1	5.4	4.4	4.4	5.3	3	4.2	4.1	4.1	1.9	3.8	3.8	4
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(7)	4.69E+01	-	mg/Kg	<0.271	<0.279	<0.284	<0.268	<0.287	<0.276	<0.281	<0.254	<0.285	<0.244	<0.273	<0.261	<0.282	<0.26	<0.247
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(7)	5.48E+04	-	mg/Kg	10000	11000	11000	14000	13000	13000	12000	3400	12000	8200	11000	3600	11000	13000	15000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	mg/Kg	3.7	4.2	2.5	1.9	4.1	3.1	1.4	<0.5	4.2	0.82	3.5	<0.5	6.1	2.8	2.6
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(7)	4.40E+02	-	mg/Kg	510	250	320	300	430	350	400	330	790	360	340	300	1500	550	650
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(7)	1.36E+01	-	mg/Kg	<0.033	0.17	<0.033	0.05	<0.033	<0.033	<0.033	<0.033	0.033	<0.033	<0.033	<0.033	<0.033	0.056	0.038
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(7)	1.56E+03	-	mg/Kg	6.1	7	6.6	8.9	7.6	7.6	8.3	4.6	7.2	6.4	7.2	3.6	6.4	6.5	6.9
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(7)	3.91E+02	-	mg/Kg	<5.0004	<4.9999	<4.9997	<4.9998	<12.5011	<12.501	<5.0002	<5.0002	<12.4989	<5	<5.0004	<5	<12.4993	<5	<5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(7)	3.91E+02	-	mg/Kg	<0.5	<0.5	<0.5	<0.5	<1.2501	<1.2501	<0.5	<0.5	<1.2499	<0.5	<0.5	<0.5	<1.2499	<1.25	<0.5
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(7)	3.91E+02	-	mg/Kg	15	18	17	20	19	19	22	14	18	19	13	11	20	18	22
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(7)	2.35E+04	-	mg/Kg	13	29	14	33	16	18	21	14	17	15	15	11	15	25	22
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(7)	7.59E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(7)	1.34E+03	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(7)	9.82E-02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(7)	5.14E-02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(7)	2.75E+00	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(7)	5.36E+01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,1-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(7)	1.15E-03	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	mg/Kg	0.00263	<0.0011	<0.0011	0.00194	<0.0009	<0.0007	<0.0007	0.00423	<0.0007	0.00424	<0.0008	0.00455	<0.0007	<0.001	0.0014
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(7)	5.07E-04	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(7)	7.10E-03	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(7)	1.64E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(7)	4.94E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	mg/Kg	0.00102	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	0.00176	<0.0007	0.00164	<0.0008	0.00192	<0.0007	<0.001	<0.0008
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.0033	<0.0045	<0.0046	<0.003	<0.0036	<0.0029	<0.0029	<0.0031	<0.003	<0.003	<0.0033	<0.0029	<0.003	<0.0039	<0.0032
2,2-Dichloropropane	-	-	-	-	-	-	-	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(7)	5.87E+02	-	mg/Kg	<0.0082	<0.0112	<0.0114	<0.0074	<0.0089	<0.0073	<0.0072	<0.0079	<0.0074	<0.0075	0.0107	<0.0072	<0.0075	<0.0097	0.022
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(7)	2.57E+02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(7)	9.38E+02	-	mg/Kg	<0.0082	<0.0112	<0.0114	<0.0074	<0.0089	<0.0073	<0.0072	<0.0079	<0.0074	<0.0075	<0.0083	<0.0072	<0.0075	<0.0097	<0.0081
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.0033	<0.0045	<0.0046	<0.003	<0.0036	<0.0029	<0.0029	<0.0031	<0.003	<0.003	<0.0033	<0.0029	<0.003	<0.0039	<0.0032
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
4-Isopropyltoluene	-	-	-	-	-	-	-	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	mg/Kg	<0.0082	<0.0112	<0.0114	<0.0074	<0.0089	<0.0073	<0.0072	<0.0079	<0.0074	<0.0075	<0.0083	<0.0072	<0.0075	<0.0097	<0.0081
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(7)	1.78E+03	-	mg/Kg	0.0479	0.0716	0.0561	0.0471	0.0202	0.0754	0.0328	0.0845	0.0282	0.377	0.0615	0.148	0.0512	0.0988	3.31
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(7)	7.96E-01	-	mg/Kg	0.00142	<0.0011	<0.0011	0.00171	<0.0009	0.00192	<0.0007	0.00134	0.00166	0.00129	0.00269	0.00109	0.0016	0.00225	0.00137
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-13 (1.5-2')	SWMU 1-13 (2-4')	SWMU 1-13 (4-6')	SWMU 1-14 (0-0.5')	SWMU 1-14 (1.5-2')	SWMU 1-15 (0-0.5')	SWMU 1-15 (1.5-2')	SWMU 1-16 (0-0.5')	SWMU 1-16 (1.5-2')	SWMU 1-17 (0-0.5')	SWMU 1-17 (1-1.5')	SWMU 1-18 (0-0.5')	SWMU 1-18 (1-1.5')	SWMU 1-19 (0-0.5')	SWMU 1-20 (0-0.5')
										1210692-022	1210692-023	1210692-024	1210811-009	1210811-010	1210811-012	1210811-013	1210811-014	1210811-015	1210811-016	1210811-017	1210858-001	1210858-002	1210858-003	1210692-001
										10/12/2012	10/12/2012	10/12/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/16/2012	10/16/2012	10/16/2012	10/11/2012
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(7)	1.25E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(7)	2.78E+02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(7)	8.86E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(7)	1.30E+02	-	mg/Kg	<0.0082	<0.0112	<0.0114	<0.0074	<0.0089	<0.0073	<0.0072	<0.0079	<0.0074	<0.0075	<0.0083	<0.0072	<0.0075	<0.0097	<0.0081
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(7)	7.39E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(7)	2.27E+01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(7)	2.48E+03	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(7)	2.12E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(7)	2.03E+01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(7)	8.47E+00	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(7)	5.71E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(7)	1.52E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(7)	7.89E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(7)	1.49E+02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(7)	5.98E+00	-	mg/Kg	0.00134	<0.0011	<0.0011	0.00165	<0.0009	<0.0007	<0.0007	0.00282	<0.0007	0.00362	<0.0008	0.00386	<0.0007	<0.001	0.0448
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(7)	3.99E+02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	0.0021
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(7)	1.11E+01	-	mg/Kg	<0.0008	0.0199	0.003	<0.0007	<0.0009	<0.0007	0.00147	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(7)	1.90E+01	-	mg/Kg	<0.0025	<0.0034	<0.0034	<0.0022	<0.0027	<0.0022	<0.0022	<0.0024	<0.0022	<0.0023	<0.0025	<0.0022	<0.0022	<0.0029	<0.0024
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.0016	<0.0022	<0.0023	<0.0015	<0.0018	<0.0015	<0.0014	<0.0016	<0.0015	<0.0015	<0.0017	<0.0014	<0.0015	<0.0019	<0.0016
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
sec-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0008	0.00128	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(7)	6.40E+02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
tert-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(7)	1.98E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(7)	5.84E+02	-	mg/Kg	0.00586	<0.0011	<0.0011	0.00574	<0.0009	0.00151	<0.0007	0.00712	0.00157	0.00708	0.00185	0.00687	0.0019	0.0029	0.00197
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(7)	1.24E+01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(7)	4.85E-01	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(7)	4.10E+02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(7)	2.50E-02	-	mg/Kg	<0.0008	<0.0011	<0.0011	<0.0007	<0.0009	<0.0007	<0.0007	<0.0008	<0.0007	<0.0008	<0.0008	<0.0007	<0.0007	<0.001	<0.0008
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(7)	7.21E+01	-	mg/Kg	0.00573	<0.0022	<0.0023	0.00542	<0.0018	0.00254	<0.0014	0.013	<0.0015	0.0234	<0.0017	0.021	0.00154	<0.0019	0.279
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(7)	4.78E+03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(7)	4.78E+01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(7)	4.60E+01	-	mg/Kg	<0.8019	<0.4032	<0.3966	<0.7968	<0.3984	<0.4023	<0.4016	<0.8027	<0.8008	<0.7992	<0.7947	<0.4001	<0.4025	<0.8038	<0.8046
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(7)	3.07E+02	-	mg/Kg	<0.6014	<0.3024	<0.2974	<0.5976	<0.2988	<0.3017	<0.3012	<0.602	<0.6006	<0.5994	<0.596	<0.3001	<0.3019	<0.6028	<0.6034
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(7)	2.91E+01	-	mg/Kg	<0.8019	<0.4032	<0.3966	<0.7968	<0.3984	<0.4023	<0.4016	<0.8027	<0.8008	<0.7992	<0.7947	<0.4001	<0.4025	<0.8038	<0.8046
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(7)	1.04E+00	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(7)	1.77E+01	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(7)	4.01E-01	-	mg/Kg	<0.5012	<0.252	<0.2479	<0.498	<0.249	<0.2514	<0.251	<0.5017	<0.5005	<0.4995	<0.4967	<0.2501	<0.2516	<0.5023	<0.5028
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(7)	5.33E+01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
2-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-13 (1.5-2')	SWMU 1-13 (2-4')	SWMU 1-13 (4-6')	SWMU 1-14 (0-0.5')	SWMU 1-14 (1.5-2')	SWMU 1-15 (0-0.5')	SWMU 1-15 (1.5-2')	SWMU 1-16 (0-0.5')	SWMU 1-16 (1.5-2')	SWMU 1-17 (0-0.5')	SWMU 1-17 (1-1.5')	SWMU 1-18 (0-0.5')	SWMU 1-18 (1-1.5')	SWMU 1-19 (0-0.5')	SWMU 1-20 (0-0.5')
										1210692-022	1210692-023	1210692-024	1210811-009	1210811-010	1210811-012	1210811-013	1210811-014	1210811-015	1210811-016	1210811-017	1210858-001	1210858-002	1210858-003	1210692-001
										10/12/2012	10/12/2012	10/12/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/16/2012	10/16/2012	10/16/2012	10/11/2012
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(7)	3.41E+00	-	mg/Kg	<0.5012	<0.252	<0.2479	<0.498	<0.249	<0.2514	<0.251	<0.5017	<0.5005	<0.4995	<0.4967	<0.2501	<0.2516	<0.5023	<0.5028
3+4-Methylphenol	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
3-Nitroaniline	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
4-Chloroaniline	2.40E+01	(3)	8.60E+01	(6)	5.99E-02	(8)	5.99E-02	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
4-Nitroaniline	2.40E+02	(3)	8.60E+02	(6)	6.45E-01	(8)	6.45E-01	-	mg/Kg	<0.8019	<0.4032	<0.3966	<0.7968	<0.3984	<0.4023	<0.4016	<0.8027	<0.8008	<0.7992	<0.7947	<0.4001	<0.4025	<0.8038	<0.8046
4-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.5012	<0.252	<0.2479	<0.498	<0.249	<0.2514	<0.251	<0.5017	<0.5005	<0.4995	<0.4967	<0.2501	<0.2516	<0.5023	<0.5028
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(7)	3.44E+03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Acenaphthylene	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Aniline	8.50E+02	(3)	3.00E+03	(6)	1.80E+00	(8)	1.80E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(7)	1.72E+04	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Azobenzene	5.10E+01	(3)	2.30E+02	(6)	3.69E-01	(8)	3.69E-01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(7)	1.48E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(7)	1.48E-01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(7)	1.48E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(7)	1.48E+01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(7)	1.21E-02	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(7)	1.07E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(7)	3.47E+02	-	mg/Kg	<1.0023	<0.504	<0.4957	1.5	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+03	(6)	9.22E+01	(8)	9.22E+01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Carbazole	-	-	-	-	-	-	-	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(7)	1.48E+02	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(7)	1.48E-01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(7)	4.45E+03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(7)	3.71E+04	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(7)	3.21E+03	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	mg/Kg	<0.8019	<0.4032	<0.3966	<0.7968	<0.3984	<0.4023	<0.4016	<0.8027	<0.8008	<0.7992	<0.7947	<0.4001	<0.4025	<0.8038	<0.8046
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(7)	2.29E+03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(7)	2.29E+03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(7)	1.83E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(7)	2.43E+02	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(7)	3.77E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(7)	1.48E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(7)	8.84E+01	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(7)	2.88E-01	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E+00	(6)	3.23E-03	(8)	3.23E-03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(7)	2.61E+02	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(7)	5.90E+00	-	mg/Kg	<0.8019	<0.4032	<0.3966	<0.7968	<0.3984	<0.4023	<0.4016	<0.8027	<0.8008	<0.7992	<0.7947	<0.4001	<0.4025	<0.8038	<0.8046
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(7)	1.83E+03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(7)	2.29E+03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(7)	1.72E+03	-	mg/Kg	<0.4009	<0.2016	<0.1983	<0.3984	<0.1992	<0.2011	<0.2008	<0.4013	<0.4004	<0.3996	<0.3974	<0.2001	<0.2013	<0.4019	<0.4023
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	mg/Kg	<1.0023	<0.504	<0.4957	<0.996	<0.498	<0.5028	<0.502	<1.0033	<1.001	<0.999	<0.9934	<0.5002	<0.5032	<1.0047	<1.0057

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-13 (1.5-2')	SWMU 1-13 (2-4')	SWMU 1-13 (4-6')	SWMU 1-14 (0-0.5')	SWMU 1-14 (1.5-2')	SWMU 1-15 (0-0.5')	SWMU 1-15 (1.5-2')	SWMU 1-16 (0-0.5')	SWMU 1-16 (1.5-2')	SWMU 1-17 (0-0.5')	SWMU 1-17 (1-1.5')	SWMU 1-18 (0-0.5')	SWMU 1-18 (1-1.5')	SWMU 1-19 (0-0.5')	SWMU 1-20 (0-0.5')
										1210692-022	1210692-023	1210692-024	1210811-009	1210811-010	1210811-012	1210811-013	1210811-014	1210811-015	1210811-016	1210811-017	1210858-001	1210858-002	1210858-003	1210692-001
										10/12/2012	10/12/2012	10/12/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/15/2012	10/16/2012	10/16/2012	10/16/2012	10/11/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	16	<10	<10	58	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<51	<50	<49	94	<48	<49	<48	<49	<50	<51	<49	<50	<50	<52	<50

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (May 2012)

(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-20 (1.5-2')	SWMU 1-20 (10-12')	SWMU 1-20 (4-6')	SWMU 1-21 (0-0.5')	SWMU 1-22 (0-0.5')	SWMU 1-22 (1.5-2')	SWMU 1-23 (0-0.5')	SWMU 1-24 (0-0.5')	SWMU 1-24 (1.5-2')	SWMU 1-24 (10.5-11.5')	SWMU 1-24 (16-18')	SWMU 1-24 (24-26')	SWMU 1-24 (32-34')	SWMU 1-25 (0.5-1')	SWMU 1-25 (0-0.5')
										1210692-003	1210692-005	1210692-004	1210858-004	1210858-006	1210858-007	1210859-001	1210521-001	1210521-003	1210521-004	1210521-005	1210521-006	1210521-007	1210859-004	1210859-003
										10/11/2012	10/11/2012	10/11/2012	10/16/2012	10/16/2012	10/16/2012	10/16/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/16/2012	10/16/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(7)	3.13E+01	-	mg/Kg	<12.5002	<5	<5	<5	<5	<5	<5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<5	<5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(7)	3.90E+00	-	mg/Kg	<3.1	2.1J	2.4J	2.1J	3.5J	1.9J	2.7J	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	3.7J	3.7J
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(7)	4.35E+03	-	mg/Kg	1000	1100	190	440	590	500	670	220	330	360	480	160	220	360	370
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(7)	1.44E+02	-	mg/Kg	<0.75	1	0.97	0.77	0.89	0.69	0.69	<0.75	0.86	<0.75	<0.75	0.89	<0.75	0.45	0.53
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(7)	7.03E+01	-	mg/Kg	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(7)	1.17E+05	-	mg/Kg	11	12	10	9.9	14	9.8	16	9.5	7.4	4.9	5.9	9.9	8.1	12	14
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(7)	2.97E+00	-	mg/Kg	11	12	10	9.9	14	9.8	16	9.5	7.4	4.9	5.9	9.9	8.1	12	14
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	mg/Kg	4.7	5.8	4.9	4.1	5.3	3.8	4	5.1	4.4	3.9	3	4.8	3.9	4.3	3.2
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(7)	4.69E+01	-	mg/Kg	<0.256	<0.293	<0.278	<0.274	<0.282	<0.273	<0.253	<0.3	<0.3	<0.3	<0.3	0.908	<0.3	<0.268	<0.259
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(7)	5.48E+04	-	mg/Kg	16000	18000	17000	14000	22000	14000	14000	20000	12000	10000	9500	13000	24000	10000	11000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	mg/Kg	3.9	1.5	2.8	2.6	3.5	2.4	3	9.3	4.4	5.2	4.9	3.4	8.6	4.1	5.6
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(7)	4.40E+02	-	mg/Kg	950	540	330	450	530	330	980	520	410	710	790	640	730	270	310
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(7)	1.36E+01	-	mg/Kg	<0.033	<0.033	<0.033	<0.033	0.034	<0.033	0.11	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	0.034	<0.033
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(7)	1.56E+03	-	mg/Kg	7.3	12	8.6	7.5	8.6	6.9	7.9	9	7	5.6	4.7	7.7	5	9.8	8.6
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(7)	3.91E+02	-	mg/Kg	<12.5002	<5	<5	<5	<5	<5	<5	<12.5	<12.5	<12.5	<12.5	<5	<12.5	<5	<5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(7)	3.91E+02	-	mg/Kg	<1.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<0.5	<0.25
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(7)	3.91E+02	-	mg/Kg	29	21	17	19	27	18	19	24	14	13	16	23	53	20	21
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(7)	2.35E+04	-	mg/Kg	17	24	16	17	26	15	21	34	13	<12.5	<12.5	17	<12.5	28	27
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(7)	7.59E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(7)	1.34E+03	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(7)	9.82E-02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(7)	5.14E-02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(7)	2.75E+00	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(7)	5.36E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,1-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(7)	1.15E-03	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	0.00102	0.00108	<0.0007	<0.0007	0.00202	0.0306	<0.001	0.0011	<0.0008
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(7)	5.07E-04	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(7)	7.10E-03	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(7)	1.64E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(7)	4.94E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	0.00599	<0.001	<0.0011	<0.0008
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.0036	<0.0038	<0.003	<0.0042	<0.0038	<0.0035	<0.0034	<0.0032	<0.0029	<0.0029	<0.0044	0.0456	<0.0042	<0.0042	<0.0032
2,2-Dichloropropane	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(7)	5.87E+02	-	mg/Kg	<0.009	<0.0094	<0.0075	<0.0104	<0.0094	<0.0088	0.00903	0.00862	0.00925	<0.0074	0.02	0.0179	<0.0104	<0.0106	<0.0079
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(7)	2.57E+02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(7)	9.38E+02	-	mg/Kg	<0.009	<0.0094	<0.0075	<0.0104	<0.0094	<0.0088	<0.0086	<0.0079	<0.0073	<0.0074	<0.0109	<0.0145	<0.0104	<0.0106	<0.0079
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.0036	<0.0038	<0.003	<0.0042	<0.0038	<0.0035	<0.0034	<0.0032	<0.0029	<0.0029	<0.0044	0.0659	<0.0042	<0.0042	<0.0032
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
4-Isopropyltoluene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	mg/Kg	<0.009	<0.0094	<0.0075	<0.0104	<0.0094	<0.0088	<0.0086	<0.0079	<0.0073	<0.0074	<0.0109	<0.0145	<0.0104	<0.0106	<0.0079
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(7)	1.78E+03	-	mg/Kg	0.119	0.0217	0.0242	0.0144	0.0637	0.0242	0.0502	0.095	0.0549	0.0361	0.0834	0.0758	0.0327	0.0739	0.0398
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(7)	7.96E-01	-	mg/Kg	0.00151	0.00791	0.00321	0.00183	0.00183	0.00192	0.00193	0.000878	0.00215	0.00208	<0.0011	0.00396	0.00152	0.0013	<0.0008
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-20 (1.5-2')	SWMU 1-20 (10-12')	SWMU 1-20 (4-6')	SWMU 1-21 (0-0.5')	SWMU 1-22 (0-0.5')	SWMU 1-22 (1.5-2')	SWMU 1-23 (0-0.5')	SWMU 1-24 (0-0.5')	SWMU 1-24 (1.5-2')	SWMU 1-24 (10.5-11.5')	SWMU 1-24 (16-18')	SWMU 1-24 (24-26')	SWMU 1-24 (32-34')	SWMU 1-25 (0.5-1')	SWMU 1-25 (0-0.5')
										1210692-003	1210692-005	1210692-004	1210858-004	1210858-006	1210858-007	1210859-001	1210521-001	1210521-003	1210521-004	1210521-005	1210521-006	1210521-007	1210859-004	1210859-003
										10/11/2012	10/11/2012	10/11/2012	10/16/2012	10/16/2012	10/16/2012	10/16/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/16/2012	10/16/2012
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(7)	1.25E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(7)	2.78E+02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(7)	8.86E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(7)	1.30E+02	-	mg/Kg	<0.009	<0.0094	<0.0075	<0.0104	<0.0094	<0.0088	0.0156	<0.0079	<0.0073	<0.0074	<0.0109	<0.0145	<0.0104	<0.0106	<0.0079
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(7)	7.39E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(7)	2.27E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(7)	2.48E+03	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(7)	2.12E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(7)	2.03E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(7)	8.47E+00	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(7)	5.71E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(7)	1.52E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(7)	7.89E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(7)	1.49E+02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(7)	5.98E+00	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	0.00733	<0.001	0.00115	<0.0008
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(7)	3.99E+02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	0.00161	<0.001	<0.0011	<0.0008
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(7)	1.11E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	0.00571	0.00166	<0.0011	<0.0008
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(7)	1.90E+01	-	mg/Kg	<0.0027	<0.0028	<0.0022	<0.0031	<0.0028	<0.0026	<0.0026	<0.0024	<0.0022	<0.0022	<0.0033	<0.0044	<0.0031	<0.0032	<0.0024
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.0018	<0.0019	<0.0015	<0.0021	<0.0019	<0.0018	<0.0017	<0.0016	<0.0015	<0.0015	<0.0022	0.0727	<0.0021	<0.0021	<0.0016
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	0.00318	<0.001	<0.0011	<0.0008
sec-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(7)	6.40E+02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
tert-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(7)	1.98E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(7)	5.84E+02	-	mg/Kg	0.00105	0.00372	0.00205	0.00147	0.00156	0.00129	0.00211	0.0023	0.00201	0.00112	<0.0011	0.00493	0.00137	0.00428	0.00202
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(7)	1.24E+01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(7)	4.85E-01	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(7)	4.10E+02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(7)	2.50E-02	-	mg/Kg	<0.0009	<0.0009	<0.0007	<0.001	<0.0009	<0.0009	<0.0009	<0.0008	<0.0007	<0.0007	<0.0011	<0.0015	<0.001	<0.0011	<0.0008
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(7)	7.21E+01	-	mg/Kg	<0.0018	<0.0019	<0.0015	<0.0021	<0.0019	<0.0018	0.0018	0.00328	<0.0015	<0.0015	<0.0022	0.0289	<0.0021	0.00404	0.00162
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(7)	4.78E+03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(7)	4.78E+01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(7)	4.60E+01	-	mg/Kg	<0.3999	<0.4003	<0.4015	<0.398	<0.804	<0.3989	<0.8035	<1.9815	<0.3999	<0.3997	<0.4003	<0.3976	<0.404	<1.9848	<2.008
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(7)	3.07E+02	-	mg/Kg	<0.2999	<0.3002	<0.3011	<0.2985	<0.603	<0.2992	<0.6026	<1.4861	<0.2999	<0.2998	<0.3002	<0.2982	<0.303	<1.4886	<1.506
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(7)	2.91E+01	-	mg/Kg	<0.3999	<0.4003	<0.4015	<0.398	<0.804	<0.3989	<0.8035	<1.9815	<0.3999	<0.3997	<0.4003	<0.3976	<0.404	<1.9848	<2.008
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(7)	1.04E+00	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(7)	1.77E+01	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(7)	4.01E-01	-	mg/Kg	<0.2499	<0.2502	<0.2509	<0.2488	<0.5025	<0.2493	<0.5022	<1.2384	<0.2499	<0.2498	<0.2502	<0.2485	<0.2525	<1.2405	<1.255
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(7)	5.33E+01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
2-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-20 (1.5-2')	SWMU 1-20 (10-12')	SWMU 1-20 (4-6')	SWMU 1-21 (0-0.5')	SWMU 1-22 (0-0.5')	SWMU 1-22 (1.5-2')	SWMU 1-23 (0-0.5')	SWMU 1-24 (0-0.5')	SWMU 1-24 (1.5-2')	SWMU 1-24 (10.5-11.5')	SWMU 1-24 (16-18')	SWMU 1-24 (24-26')	SWMU 1-24 (32-34')	SWMU 1-25 (0.5-1')	SWMU 1-25 (0-0.5')
										1210692-003	1210692-005	1210692-004	1210858-004	1210858-006	1210858-007	1210859-001	1210521-001	1210521-003	1210521-004	1210521-005	1210521-006	1210521-007	1210859-004	1210859-003
										10/11/2012	10/11/2012	10/11/2012	10/16/2012	10/16/2012	10/16/2012	10/16/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/16/2012	10/16/2012
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(7)	3.41E+00	-	mg/Kg	<0.2499	<0.2502	<0.2509	<0.2488	<0.5025	<0.2493	<0.5022	<1.2384	<0.2499	<0.2498	<0.2502	<0.2485	<0.2525	<1.2405	<1.255
3+4-Methylphenol	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
3-Nitroaniline	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
4-Chloroaniline	2.40E+01	(3)	8.60E+01	(6)	5.99E-02	(8)	5.99E-02	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
4-Nitroaniline	2.40E+02	(3)	8.60E+02	(6)	6.45E-01	(8)	6.45E-01	-	mg/Kg	<0.3999	<0.4003	<0.4015	<0.398	<0.804	<0.3989	<0.8035	<1.9815	<0.3999	<0.3997	<0.4003	<0.3976	<0.404	<1.9848	<2.008
4-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.2499	<0.2502	<0.2509	<0.2488	<0.5025	<0.2493	<0.5022	<1.2384	<0.2499	<0.2498	<0.2502	<0.2485	<0.2525	<1.2405	<1.255
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(7)	3.44E+03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Acenaphthylene	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Aniline	8.50E+02	(3)	3.00E+03	(6)	1.80E+00	(8)	1.80E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(7)	1.72E+04	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Azobenzene	5.10E+01	(3)	2.30E+02	(6)	3.69E-01	(8)	3.69E-01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(7)	1.48E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(7)	1.48E-01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(7)	1.48E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(7)	1.48E+01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(7)	1.21E-02	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(7)	1.07E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(7)	3.47E+02	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+03	(6)	9.22E+01	(8)	9.22E+01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Carbazole	-	-	-	-	-	-	-	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(7)	1.48E+02	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(7)	1.48E-01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(7)	4.45E+03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(7)	3.71E+04	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(7)	3.21E+03	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	mg/Kg	<0.3999	<0.4003	<0.4015	<0.398	<0.804	<0.3989	<0.8035	<1.2384	<0.2499	<0.2498	<0.2502	<0.2485	<0.2525	<1.9848	<2.008
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(7)	2.29E+03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(7)	2.29E+03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(7)	1.83E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(7)	2.43E+02	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(7)	3.77E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(7)	1.48E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(7)	8.84E+01	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(7)	2.88E-01	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E+00	(6)	3.23E-03	(8)	3.23E-03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(7)	2.61E+02	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(7)	5.90E+00	-	mg/Kg	<0.3999	<0.4003	<0.4015	<0.398	<0.804	<0.3989	<0.8035	<1.9815	<0.3999	<0.3997	<0.4003	<0.3976	<0.404	<1.9848	<2.008
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(7)	1.83E+03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(7)	2.29E+03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(7)	1.72E+03	-	mg/Kg	<0.1999	<0.2001	<0.2007	<0.199	<0.402	<0.1995	<0.4017	<0.9908	<0.1999	<0.1999	<0.2001	<0.1988	<0.202	<0.9924	<1.004
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	mg/Kg	<0.4998	<0.5003	<0.5018	<0.4975	<1.005	<0.4987	<1.0044	<2.4769	<0.4998	<0.4997	<0.5003	<0.497	<0.5051	<2.481	<2.51

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-20 (1.5-2')	SWMU 1-20 (10-12')	SWMU 1-20 (4-6')	SWMU 1-21 (0-0.5')	SWMU 1-22 (0-0.5')	SWMU 1-22 (1.5-2')	SWMU 1-23 (0-0.5')	SWMU 1-24 (0-0.5')	SWMU 1-24 (1.5-2')	SWMU 1-24 (10.5-11.5')	SWMU 1-24 (16-18')	SWMU 1-24 (24-26')	SWMU 1-24 (32-34')	SWMU 1-25 (0.5-1')	SWMU 1-25 (0-0.5')
										1210692-003	1210692-005	1210692-004	1210858-004	1210858-006	1210858-007	1210859-001	1210521-001	1210521-003	1210521-004	1210521-005	1210521-006	1210521-007	1210859-004	1210859-003
										10/11/2012	10/11/2012	10/11/2012	10/16/2012	10/16/2012	10/16/2012	10/16/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/8/2012	10/16/2012	10/16/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	<10	<10	<10	<10	<10	<10	14	<10	<10	<10	<10	<10	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<49	<50	<51	<52	<51	<49	<52	<51	<50	<49	<49	<51	<50	<50	<51

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (May 2012)

(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-26 (0-0.5')	SWMU 1-27 (0-0.5')	SWMU 1-27 (1.5-2')	SWMU 1-28 (0-0.5')	SWMU 1-28 (1.5-2')	SWMU 1-29 (0-0.5')	SWMU 1-30 (0-0.5')	SWMU 1-30 (1.5-2')	SWMU 1-30 (4-6')	SWMU 1-31 (0-0.5')	SWMU 1-32 (0-0.5')	SWMU 1-33 (0-0.5')	SWMU 1-34 (0-0.5')	SWMU 1-35 (0-0.5')	SWMU 1-35 (1.5-2')
										1210859-005	1210692-009	1210692-010	1210692-011	1210692-012	1210859-006	1210692-014	1210692-015	1210692-016	1210856-001	1210856-002	1210856-004	1210856-005	1210692-017	1210692-018
										10/16/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/16/2012	10/12/2012	10/12/2012	10/12/2012	10/16/2012	10/16/2012	10/16/2012	10/16/2012	10/12/2012	10/12/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(7)	3.13E+01	-	mg/Kg	<5	<5	<12.5004	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(7)	3.90E+00	-	mg/Kg	1.5J	3.5J	<3.1	2.9J	2.0J	2.3J	2.0J	1.5J	1.8J	3.5J	3.1J	2.3J	2.9J	2.1J	3.4J
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(7)	4.35E+03	-	mg/Kg	390	560	750	490	570	550	580	610	870	350	600	680	740	610	1200
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(7)	1.44E+02	-	mg/Kg	0.62	0.6	<0.75	0.7	0.41	0.69	0.69	0.67	0.47	0.56	0.64	0.64	0.52	0.67	0.46
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(7)	7.03E+01	-	mg/Kg	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(7)	1.17E+05	-	mg/Kg	7.9	8	8	10	5.2	17	13	12	7.5	12	17	12	12	14	11
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(7)	2.97E+00	-	mg/Kg	7.9	8	8	10	5.2	17	13	12	7.5	12	17	12	12	14	11
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	mg/Kg	3.7	2.9	4.3	3.7	2.7	5.1	4	3.8	3.1	3.8	4	3.2	2.7	3.9	3.4
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(7)	4.69E+01	-	mg/Kg	<0.246	0.28	<0.26	1.4	<0.267	6	0.63	<0.274	<0.282	0.26	<0.247	<0.243	<0.251	0.28	0.29
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(7)	5.48E+04	-	mg/Kg	11000	11000	11000	13000	8800	15000	14000	14000	12000	13000	14000	13000	9800	13000	10000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	mg/Kg	2.7	1.4	2.7	2.6	1.4	7	3.7	3.1	3.3	5.2	6.3	3.7	2.5	2.6	2.3
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(7)	4.40E+02	-	mg/Kg	670	470	1300	520	430	620	550	530	840	420	440	800	520	500	820
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(7)	1.36E+01	-	mg/Kg	0.051	0.054	<0.033	0.67	<0.033	0.22	0.13	0.14	<0.033	0.063	0.13	0.055	0.14	0.083	0.056
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(7)	1.56E+03	-	mg/Kg	6.1	5.8	6	7.1	3.7	9.3	7.3	6.9	4.7	8	13	8.9	7.5	10	9
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(7)	3.91E+02	-	mg/Kg	<5	<5	<12.5004	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(7)	3.91E+02	-	mg/Kg	<0.5	<0.5	<1.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.25	<0.25	<0.25	<0.5	<0.5
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(7)	3.91E+02	-	mg/Kg	14	17	20	18	12	19	21	17	16	19	22	19	18	26	19
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(7)	2.35E+04	-	mg/Kg	16	15	13	19	8.8	48	26	19	10	30	36	23	28	23	22
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(7)	7.59E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(7)	1.34E+03	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(7)	9.82E-02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(7)	5.14E-02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(7)	2.75E+00	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(7)	5.36E+01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,1-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(7)	1.15E-03	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	mg/Kg	0.00207	0.00844	<0.0008	0.00209	<1.0132	0.00116	0.00268	<0.0007	<0.0007	0.00138	0.00179	0.00116	0.00524	0.00341	0.00197
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(7)	5.07E-04	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(7)	7.10E-03	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(7)	1.64E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(7)	4.94E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	mg/Kg	0.000828	0.00334	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	0.00196	0.00139	0.000762
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.0029	<0.0037	<0.003	<0.004	<4.0529	<0.0033	<0.004	<0.0028	<0.0027	<0.0034	<0.0033	<0.0036	<0.0042	<0.0036	<0.0027
2,2-Dichloropropane	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(7)	5.87E+02	-	mg/Kg	<0.0073	0.0722	<0.0075	0.0161	<10.1322	<0.0082	0.0213	<0.007	<0.0069	<0.0084	<0.0083	<0.009	<0.0106	<0.009	<0.0068
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(7)	2.57E+02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(7)	9.38E+02	-	mg/Kg	<0.0073	<0.0094	<0.0075	<0.0101	<10.1322	<0.0082	<0.0101	<0.007	<0.0069	<0.0084	<0.0083	<0.009	<0.0106	<0.009	<0.0068
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.0029	<0.0037	<0.003	<0.004	<4.0529	<0.0033	<0.004	<0.0028	<0.0027	<0.0034	<0.0033	<0.0036	<0.0042	<0.0036	<0.0027
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
4-Isopropyltoluene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	mg/Kg	<0.0073	<0.0094	<0.0075	<0.0101	<10.1322	<0.0082	<0.0101	<0.007	<0.0069	<0.0084	<0.0083	<0.009	<0.0106	<0.009	<0.0068
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(7)	1.78E+03	-	mg/Kg	0.0644	2.44	0.169	0.135	54.1	0.0641	0.692	0.0541	0.0215	0.0344	0.0551	0.0526	0.0654	0.0608	0.0525
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(7)	7.96E-01	-	mg/Kg	0.00185	0.00213	0.0013	0.00299	2.53	0.00236	0.0024	0.0014	0.00109	0.00119	0.0014	0.00146	0.00184	0.00226	0.00134
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-26 (0-0.5')	SWMU 1-27 (0-0.5')	SWMU 1-27 (1.5-2')	SWMU 1-28 (0-0.5')	SWMU 1-28 (1.5-2')	SWMU 1-29 (0-0.5')	SWMU 1-30 (0-0.5')	SWMU 1-30 (1.5-2')	SWMU 1-30 (4-6')	SWMU 1-31 (0-0.5')	SWMU 1-32 (0-0.5')	SWMU 1-33 (0-0.5')	SWMU 1-34 (0-0.5')	SWMU 1-35 (0-0.5')	SWMU 1-35 (1.5-2')
										1210859-005	1210692-009	1210692-010	1210692-011	1210692-012	1210859-006	1210692-014	1210692-015	1210692-016	1210856-001	1210856-002	1210856-004	1210856-005	1210692-017	1210692-018
										10/16/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/16/2012	10/12/2012	10/12/2012	10/12/2012	10/16/2012	10/16/2012	10/16/2012	10/16/2012	10/12/2012	10/12/2012
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(7)	1.25E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(7)	2.78E+02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(7)	8.86E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(7)	1.30E+02	-	mg/Kg	<0.0073	<0.0094	<0.0075	<0.0101	<10.1322	<0.0082	<0.0101	<0.007	<0.0069	<0.0084	<0.0083	<0.009	<0.0106	<0.009	<0.0068
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(7)	7.39E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(7)	2.27E+01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(7)	2.48E+03	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(7)	2.12E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(7)	2.03E+01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(7)	8.47E+00	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(7)	5.71E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(7)	1.52E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(7)	7.89E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(7)	1.49E+02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(7)	5.98E+00	-	mg/Kg	0.00121	0.0636	0.00135	0.0018	<1.0132	<0.0008	0.00644	<0.0007	<0.0007	<0.0008	0.00107	0.00103	0.00259	0.00199	0.00141
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(7)	3.99E+02	-	mg/Kg	<0.0007	0.0031	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(7)	1.11E+01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(7)	1.90E+01	-	mg/Kg	<0.0022	<0.0028	<0.0023	<0.003	<3.0397	<0.0025	<0.003	<0.0021	<0.0021	<0.0025	<0.0025	<0.0027	<0.0032	<0.0027	<0.002
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.0015	<0.0019	<0.0015	<0.002	<2.0264	<0.0016	<0.002	<0.0014	<0.0014	<0.0017	<0.0017	<0.0018	<0.0021	<0.0018	<0.0014
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	mg/Kg	<0.0007	0.00173	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
sec-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(7)	6.40E+02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
tert-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(7)	1.98E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(7)	5.84E+02	-	mg/Kg	0.00369	0.0114	0.0024	0.00473	3.54	0.00327	0.00603	0.00263	0.00187	0.00295	0.00442	0.00437	0.00869	0.00888	0.00572
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(7)	1.24E+01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(7)	4.85E-01	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(7)	4.10E+02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(7)	2.50E-02	-	mg/Kg	<0.0007	<0.0009	<0.0008	<0.001	<1.0132	<0.0008	<0.001	<0.0007	<0.0007	<0.0008	<0.0008	<0.0009	<0.0011	<0.0009	<0.0007
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(7)	7.21E+01	-	mg/Kg	0.00503	0.447	0.00781	0.0091	2.38	0.00307	0.0493	0.00149	<0.0014	0.0032	0.00394	0.00362	0.00953	0.00906	0.00512
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(7)	4.78E+03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(7)	4.78E+01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(7)	4.60E+01	-	mg/Kg	<0.7937	<0.804	<0.4034	<0.8019	<0.4012	<1.5947	<0.8	<1.9789	<0.4049	<4.0067	<4.0094	<3.9947	<2.0013	<4	<2.0107
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(7)	3.07E+02	-	mg/Kg	<0.5952	<0.603	<0.3025	<0.6014	<0.3009	<1.196	<0.6	<1.4842	<0.3036	<3.005	<3.007	<2.996	<1.501	<3	<1.508
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(7)	2.91E+01	-	mg/Kg	<0.7937	<0.804	<0.4034	<0.8019	<0.4012	<1.5947	<0.8	<1.9789	<0.4049	<4.0067	<4.0094	<3.9947	<2.0013	<4	<2.0107
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(7)	1.04E+00	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(7)	1.77E+01	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(7)	4.01E-01	-	mg/Kg	<0.496	<0.5025	<0.2521	<0.5012	<0.2508	<0.9967	<0.5	<1.2368	<0.253	<2.5042	<2.5058	<2.4967	<1.2508	<2.5	<1.2567
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(7)	5.33E+01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
2-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-26 (0-0.5')	SWMU 1-27 (0-0.5')	SWMU 1-27 (1.5-2')	SWMU 1-28 (0-0.5')	SWMU 1-28 (1.5-2')	SWMU 1-29 (0-0.5')	SWMU 1-30 (0-0.5')	SWMU 1-30 (1.5-2')	SWMU 1-30 (4-6')	SWMU 1-31 (0-0.5')	SWMU 1-32 (0-0.5')	SWMU 1-33 (0-0.5')	SWMU 1-34 (0-0.5')	SWMU 1-35 (0-0.5')	SWMU 1-35 (1.5-2')
										1210859-005	1210692-009	1210692-010	1210692-011	1210692-012	1210859-006	1210692-014	1210692-015	1210692-016	1210856-001	1210856-002	1210856-004	1210856-005	1210692-017	1210692-018
										10/16/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/16/2012	10/12/2012	10/12/2012	10/12/2012	10/16/2012	10/16/2012	10/16/2012	10/16/2012	10/12/2012	10/12/2012
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(7)	3.41E+00	-	mg/Kg	<0.496	<0.5025	<0.2521	<0.5012	<0.2508	<0.9967	<0.5	<1.2368	<0.253	<2.5042	<2.5058	<2.4967	<1.2508	<2.5	<1.2567
3+4-Methylphenol	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
3-Nitroaniline	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
4-Chloroaniline	2.40E+01	(3)	8.60E+01	(6)	5.99E-02	(8)	5.99E-02	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
4-Nitroaniline	2.40E+02	(3)	8.60E+02	(6)	6.45E-01	(8)	6.45E-01	-	mg/Kg	<0.7937	<0.804	<0.4034	<0.8019	<0.4012	<1.5947	<0.8	<1.9789	<0.4049	<4.0067	<4.0094	<3.9947	<2.0013	<4	<2.0107
4-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.496	<0.5025	<0.2521	<0.5012	<0.2508	<0.9967	<0.5	<1.2368	<0.253	<2.5042	<2.5058	<2.4967	<1.2508	<2.5	<1.2567
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(7)	3.44E+03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Acenaphthylene	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Aniline	8.50E+02	(3)	3.00E+03	(6)	1.80E+00	(8)	1.80E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(7)	1.72E+04	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Azobenzene	5.10E+01	(3)	2.30E+02	(6)	3.69E-01	(8)	3.69E-01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(7)	1.48E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(7)	1.48E-01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(7)	1.48E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(7)	1.48E+01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(7)	1.21E-02	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(7)	1.07E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(7)	3.47E+02	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+03	(6)	9.22E+01	(8)	9.22E+01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Carbazole	-	-	-	-	-	-	-	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(7)	1.48E+02	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(7)	1.48E-01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(7)	4.45E+03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(7)	3.71E+04	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(7)	3.21E+03	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	mg/Kg	<0.7937	<0.804	<0.4034	<0.8019	<0.4012	<1.5947	<0.8	<1.9789	<0.4049	<4.0067	<4.0094	<3.9947	<2.0013	<4	<2.0107
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(7)	2.29E+03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(7)	2.29E+03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(7)	1.83E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(7)	2.43E+02	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(7)	3.77E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(7)	1.48E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(7)	8.84E+01	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(7)	2.88E-01	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E+00	(6)	3.23E-03	(8)	3.23E-03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(7)	2.61E+02	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(7)	5.90E+00	-	mg/Kg	<0.7937	<0.804	<0.4034	<0.8019	<0.4012	<1.5947	<0.8	<1.9789	<0.4049	<4.0067	<4.0094	<3.9947	<2.0013	<4	<2.0107
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(7)	1.83E+03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(7)	2.29E+03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(7)	1.72E+03	-	mg/Kg	<0.3968	<0.402	<0.2017	<0.4009	<0.2006	<0.7973	<0.4	<0.9894	<0.2024	<2.0033	<2.0047	<1.9973	<1.0007	<2	<1.0054
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	mg/Kg	<0.9921	<1.005	<0.5042	<1.0023	<0.5015	<1.9934	<1	<2.4736	<0.5061	<5.0083	<5.0117	<4.9933	<2.5017	<5	<2.5134

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-26 (0-0.5')	SWMU 1-27 (0-0.5')	SWMU 1-27 (1.5-2')	SWMU 1-28 (0-0.5')	SWMU 1-28 (1.5-2')	SWMU 1-29 (0-0.5')	SWMU 1-30 (0-0.5')	SWMU 1-30 (1.5-2')	SWMU 1-30 (4-6')	SWMU 1-31 (0-0.5')	SWMU 1-32 (0-0.5')	SWMU 1-33 (0-0.5')	SWMU 1-34 (0-0.5')	SWMU 1-35 (0-0.5')	SWMU 1-35 (1.5-2')
										1210859-005	1210692-009	1210692-010	1210692-011	1210692-012	1210859-006	1210692-014	1210692-015	1210692-016	1210856-001	1210856-002	1210856-004	1210856-005	1210692-017	1210692-018
										10/16/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/16/2012	10/12/2012	10/12/2012	10/12/2012	10/16/2012	10/16/2012	10/16/2012	10/16/2012	10/12/2012	10/12/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	<10	<10	27	<10	76	17	23	<10	<10	19	20	<10	12	15
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	9.3	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	24
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<48	<50	<50	53	<50	110	79	<49	<49	<51	100	110	<50	72	130

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (May 2012)

(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-35 (4-6')	SWMU 1-36 (0-0.5')	SWMU 1-37 (0-0.5')	SWMU 1-37 (1.5-2')	SWMU 1-37 (12-13')	SWMU 1-37 (13-14')	SWMU 1-37 (17-18')	SWMU 1-37 (8.5-9')	SWMU 1-37 (8-8.5')	SWMU 1-38 (0-0.5')	SWMU 1-38 (1.5-2')	SWMU 1-38 (6-8')	SWMU 1-39 (0-0.5')
										1210692-019	1210856-006	1210653-001	1210653-002	1210653-005	1210653-006	1210653-007	1210653-004	1210653-003	1210692-006	1210692-007	1210692-008	1210859-002
										10/12/2012	10/16/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/11/2012	10/11/2012	10/11/2012	10/16/2012
Metals (mg/kg)																						
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(7)	3.13E+01	-	mg/Kg	<5	<5	<5	<5	<5	<12.5	<12.5	<5	<5	<5	<5	<5	<5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(7)	3.90E+00	-	mg/Kg	2.3J	2.5J	<1.3	2.2J	<1.3	<3.1	3.9J	<1.3	2.1J	1.7J	1.9J	2.2J	<1.3
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(7)	4.35E+03	-	mg/Kg	440	690	350	370	210	280	870	130	130	360	81	540	450
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(7)	1.44E+02	-	mg/Kg	0.67	0.66	0.85	0.79	0.72	1.2	1	0.83	0.77	0.7	0.84	0.9	0.71
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(7)	7.03E+01	-	mg/Kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(7)	1.17E+05	-	mg/Kg	9.8	21	17	24	15	13	13	8.6	10	24	12	12	10
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(7)	2.97E+00	-	mg/Kg	9.8	21	17	24	15	13	13	8.6	10	24	12	12	10
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	mg/Kg	3.6	4.3	4.7	4.4	4.1	6	6.2	3.8	4.1	3.9	4.9	5.2	3.9
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(7)	4.69E+01	-	mg/Kg	<0.287	<0.255	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	1	0.3	<0.293	<0.259
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(7)	5.48E+04	-	mg/Kg	16000	16000	18000	16000	15000	20000	24000	16000	18000	14000	20000	22000	18000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	mg/Kg	3.3	6.8	2.8	3.1	2.8	4	5	2.8	3.6	2.8	3.2	<0.5	4.6
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(7)	4.40E+02	-	mg/Kg	770	580	610	570	530	320	1400	230	350	480	600	570	580
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(7)	1.36E+01	-	mg/Kg	<0.033	0.2	0.051	0.054	<0.033	<0.033	<0.033	<0.033	<0.033	0.08	<0.033	<0.033	<0.033
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(7)	1.56E+03	-	mg/Kg	6.2	12	8.4	7.6	6.9	11	12	6.9	7.3	7.7	8.5	11	6.2
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(7)	3.91E+02	-	mg/Kg	<5	<5	<5	<5	<5	<12.5	<12.5	<5	<5	<5	<5	<5	<5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(7)	3.91E+02	-	mg/Kg	<0.5	<0.5	<0.5	<0.5	<0.5	<1.2501	<1.25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(7)	3.91E+02	-	mg/Kg	25	20	18	19	17	20	16	14	17	17	30	26	25
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(7)	2.35E+04	-	mg/Kg	12	50	22	25	16	20	21	13	16	34	18	22	16
Volatile Organic Compounds - (EPA Method 8260) mg/kg																						
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(7)	7.59E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(7)	1.34E+03	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(7)	9.82E-02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(7)	5.14E-02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(7)	2.75E+00	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(7)	5.36E+01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,1-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(7)	1.15E-03	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	mg/Kg	0.00177	0.00313	0.00193	0.00112	<0.0009	<0.0008	0.00196	<0.0014	<0.0011	<0.0008	<0.0008	0.00123	<0.0008
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(7)	5.07E-04	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(7)	7.10E-03	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(7)	1.64E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(7)	4.94E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	mg/Kg	0.000722	0.00115	<0.001	<0.0008	<0.0009	<0.0008	0.00122	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.0028	<0.0038	<0.0039	<0.003	<0.0037	<0.0034	<0.0032	<0.0055	<0.0042	<0.0034	<0.0032	<0.0032	<0.0031
2,2-Dichloropropane	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(7)	5.87E+02	-	mg/Kg	<0.007	<0.0095	0.0182	0.00999	<0.0092	<0.0084	<0.0081	<0.0136	<0.0105	<0.0085	0.0138	<0.008	<0.0077
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(7)	2.57E+02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(7)	9.38E+02	-	mg/Kg	<0.007	<0.0095	<0.0096	<0.0076	<0.0092	<0.0084	<0.0081	<0.0136	<0.0105	<0.0085	<0.0079	<0.008	<0.0077
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.0028	<0.0038	<0.0039	<0.003	<0.0037	<0.0034	<0.0032	<0.0055	<0.0042	<0.0034	<0.0032	<0.0032	<0.0031
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
4-Isopropyltoluene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	mg/Kg	<0.007	<0.0095	0.0116	<0.0076	<0.0092	<0.0084	<0.0081	<0.0136	<0.0105	<0.0085	<0.0079	<0.008	<0.0077
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(7)	1.78E+03	-	mg/Kg	0.0381	0.0535	0.109	0.0745	0.0141	0.0148	0.0127	0.0148	0.0133	0.156	0.158	0.025	0.0521
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(7)	7.96E-01	-	mg/Kg	0.00202	0.00251	0.00239	0.00203	0.00165	0.00157	0.0106	0.00221	0.00174	0.00204	0.00122	0.0114	0.00189
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-35 (4-6')	SWMU 1-36 (0-0.5')	SWMU 1-37 (0-0.5')	SWMU 1-37 (1.5-2')	SWMU 1-37 (12-13')	SWMU 1-37 (13-14')	SWMU 1-37 (17-18')	SWMU 1-37 (8.5-9')	SWMU 1-37 (8-8.5')	SWMU 1-38 (0-0.5')	SWMU 1-38 (1.5-2')	SWMU 1-38 (6-8')	SWMU 1-39 (0-0.5')
										1210692-019	1210856-006	1210653-001	1210653-002	1210653-005	1210653-006	1210653-007	1210653-004	1210653-003	1210692-006	1210692-007	1210692-008	1210859-002
										10/12/2012	10/16/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/11/2012	10/11/2012	10/11/2012	10/16/2012
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(7)	1.25E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(7)	2.78E+02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(7)	8.86E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(7)	1.30E+02	-	mg/Kg	<0.007	<0.0095	<0.0096	<0.0076	<0.0092	<0.0084	<0.0081	<0.0136	<0.0105	<0.0085	<0.0079	<0.008	<0.0077
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(7)	7.39E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(7)	2.27E+01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(7)	2.48E+03	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(7)	2.12E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(7)	2.03E+01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(7)	8.47E+00	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(7)	5.71E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(7)	1.52E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(7)	7.89E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(7)	1.49E+02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(7)	5.98E+00	-	mg/Kg	0.00107	0.00147	0.00119	<0.0008	<0.0009	<0.0008	0.00187	<0.0014	<0.0011	0.00165	0.00135	0.00107	<0.0008
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(7)	3.99E+02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(7)	1.11E+01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	0.00957	0.00477	<0.0008	0.0444	0.0101	<0.0008	<0.0008	<0.0008	<0.0008
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(7)	1.90E+01	-	mg/Kg	<0.0021	<0.0028	<0.0029	<0.0023	<0.0028	<0.0025	<0.0024	<0.0041	<0.0032	<0.0025	<0.0024	<0.0024	<0.0023
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.0014	<0.0019	<0.0019	<0.0015	<0.0018	<0.0017	<0.0016	<0.0027	<0.0021	<0.0017	<0.0016	<0.0016	<0.0015
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
sec-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(7)	6.40E+02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
tert-Butylbenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(7)	1.98E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(7)	5.84E+02	-	mg/Kg	0.00423	0.00652	0.00454	0.00259	0.000948	0.00127	0.0074	0.00179	0.00109	0.0019	0.00114	0.00448	0.00109
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(7)	1.24E+01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(7)	4.85E-01	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(7)	4.10E+02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(7)	2.50E-02	-	mg/Kg	<0.0007	<0.0009	<0.001	<0.0008	<0.0009	<0.0008	<0.0008	<0.0014	<0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(7)	7.21E+01	-	mg/Kg	0.00434	0.0061	0.00526	0.00305	<0.0018	<0.0017	0.00597	<0.0027	<0.0021	0.00901	0.00793	0.00276	<0.0015
Semi Volatile Organics - (EPA Method 8270) mg/kg																						
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(7)	4.21E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(7)	1.29E+02	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(7)	1.47E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	2.35E+00	(8)	2.35E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(7)	4.78E+03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(7)	4.78E+01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(7)	4.60E+01	-	mg/Kg	<0.8021	<3.9987	<0.8011	<0.816	<0.3984	<0.3951	<0.4004	<0.3962	<0.3954	<0.4046	<0.8051	<0.3992	<0.398
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(7)	3.07E+02	-	mg/Kg	<0.6016	<2.999	<0.6008	<0.612	<0.2988	<0.2963	<0.3003	<0.2971	<0.2965	<0.3034	<0.6038	<0.2994	<0.2985
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(7)	2.91E+01	-	mg/Kg	<0.8021	<3.9987	<0.8011	<0.816	<0.3984	<0.3951	<0.4004	<0.3962	<0.3954	<0.4046	<0.8051	<0.3992	<0.398
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(7)	1.04E+00	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(7)	1.77E+01	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(7)	4.01E-01	-	mg/Kg	<0.5013	<2.4992	<0.5007	<0.51	<0.249	<0.247	<0.2503	<0.2476	<0.2471	<0.2529	<0.5032	<0.2495	<0.2488
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(7)	5.33E+01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
2-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-35 (4-6')	SWMU 1-36 (0-0.5')	SWMU 1-37 (0-0.5')	SWMU 1-37 (1.5-2')	SWMU 1-37 (12-13')	SWMU 1-37 (13-14')	SWMU 1-37 (17-18')	SWMU 1-37 (8.5-9')	SWMU 1-37 (8-8.5')	SWMU 1-38 (0-0.5')	SWMU 1-38 (1.5-2')	SWMU 1-38 (6-8')	SWMU 1-39 (0-0.5')
										1210692-019	1210856-006	1210653-001	1210653-002	1210653-005	1210653-006	1210653-007	1210653-004	1210653-003	1210692-006	1210692-007	1210692-008	1210859-002
										10/12/2012	10/16/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/11/2012	10/11/2012	10/11/2012	10/16/2012
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(7)	3.41E+00	-	mg/Kg	<0.5013	<2.4992	<0.5007	<0.51	<0.249	<0.247	<0.2503	<0.2476	<0.2471	<0.2529	<0.5032	<0.2495	<0.2488
3+4-Methylphenol	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
3-Nitroaniline	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
4-Chloroaniline	2.40E+01	(3)	8.60E+01	(6)	5.99E-02	(8)	5.99E-02	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
4-Nitroaniline	2.40E+02	(3)	8.60E+02	(6)	6.45E-01	(8)	6.45E-01	-	mg/Kg	<0.8021	<3.9987	<0.8011	<0.816	<0.3984	<0.3951	<0.4004	<0.3962	<0.3954	<0.4046	<0.8051	<0.3992	<0.398
4-Nitrophenol	-	-	-	-	-	-	-	-	mg/Kg	<0.5013	<2.4992	<0.5007	<0.51	<0.249	<0.247	<0.2503	<0.2476	<0.2471	<0.2529	<0.5032	<0.2495	<0.2488
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(7)	3.44E+03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Acenaphthylene	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Aniline	8.50E+02	(3)	3.00E+03	(6)	1.80E+00	(8)	1.80E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(7)	1.72E+04	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Azobenzene	5.10E+01	(3)	2.30E+02	(6)	3.69E-01	(8)	3.69E-01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(7)	1.48E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(7)	1.48E-01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(7)	1.48E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(7)	1.48E+01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(7)	1.21E-02	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(7)	1.07E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(7)	3.47E+02	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+03	(6)	9.22E+01	(8)	9.22E+01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Carbazole	-	-	-	-	-	-	-	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(7)	1.48E+02	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(7)	1.48E-01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(7)	4.45E+03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(7)	3.71E+04	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(7)	3.21E+03	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	mg/Kg	<0.8021	<3.9987	<0.8011	<0.816	<0.3984	<0.3951	<0.4004	<0.3962	<0.3954	<0.4046	<0.8051	<0.3992	<0.398
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(7)	2.29E+03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(7)	2.29E+03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(7)	1.83E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(7)	5.91E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(7)	2.43E+02	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(7)	3.77E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(7)	1.48E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(7)	8.84E+01	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(7)	1.64E+00	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(7)	2.88E-01	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E+00	(6)	3.23E-03	(8)	3.23E-03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(7)	2.61E+02	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(7)	5.90E+00	-	mg/Kg	<0.8021	<3.9987	<0.8011	<0.816	<0.3984	<0.3951	<0.4004	<0.3962	<0.3954	<0.4046	<0.8051	<0.3992	<0.398
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(7)	1.83E+03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(7)	2.29E+03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(7)	1.72E+03	-	mg/Kg	<0.4011	<1.9993	<0.4005	<0.408	<0.1992	<0.1976	<0.2002	<0.1981	<0.1977	<0.2023	<0.4025	<0.1996	<0.199
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	mg/Kg	<1.0027	<4.9983	<1.0013	<1.0201	<0.498	<0.4939	<0.5005	<0.4952	<0.4942	<0.5057	<1.0064	<0.499	<0.4975

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-35 (4-6')	SWMU 1-36 (0-0.5')	SWMU 1-37 (0-0.5')	SWMU 1-37 (1.5-2')	SWMU 1-37 (12-13')	SWMU 1-37 (13-14')	SWMU 1-37 (17-18')	SWMU 1-37 (8.5-9')	SWMU 1-37 (8-8.5')	SWMU 1-38 (0-0.5')	SWMU 1-38 (1.5-2')	SWMU 1-38 (6-8')	SWMU 1-39 (0-0.5')
										1210692-019	1210856-006	1210653-001	1210653-002	1210653-005	1210653-006	1210653-007	1210653-004	1210653-003	1210692-006	1210692-007	1210692-008	1210859-002
										10/12/2012	10/16/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/11/2012	10/11/2012	10/11/2012	10/16/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																						
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	56	100	100	<10	<10	<10	<10	<10	<10	<10	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<52	150	130	130	<50	<50	<49	<51	<51	<51	<51	<51	<51

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (May 2012)

(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-1 (0-0.5)	SWMU 14-1 (1.5-2)	SWMU 14-1 (10-12)	SWMU 14-1 (48-50')	SWMU 14-2 (0-0.5')	SWMU 14-2 (1.5-2.0')	SWMU 14-2 (16-18')	SWMU 14-2 (24-25')	SWMU 14-2 (8-10')	SWMU 14-3 (0-0.5')	SWMU 14-3 (1.5-2')	SWMU 14-3 (12-14')	SWMU 14-3 (25.5-26')	SWMU 14-3 (8-10')	SWMU 14-4 (0-0.5')	SWMU 14-4 (1.5-2.0')
									1207748-001	1207748-002	1207748-003	1207900-006	1207917-005	1207917-006	1207917-009	1207917-010	1207917-007	1207900-001	1207900-002	1207900-004	1207900-005	1207900-003	1207917-001	1207917-002
									7/16/2012	7/16/2012	7/16/2012	7/18/2012	7/17/2012	7/17/2012	7/17/2012	7/17/2012	7/17/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/17/2012	7/17/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(8)	3.13E+01	-	<12.5	<12.5	<12.5	<12.5	4	3.6	4.7	3.3	0.82	4.8	<2.5	<12.5	<12.5	<12.5	<2.5	<2.5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(8)	3.90E+00	-	<0.77	<0.77	<0.77	<3.1	<3.1	<3.1	<3.1	<3.1	1.6J	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(8)	4.35E+03	-	790	550	1100	750	700	470	520	460	400	920	560	350	630	380	870	870
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(8)	1.44E+02	-	0.61	0.89	0.69	1.4	0.68	0.76	1.3	1.1	0.58	0.77	0.65	0.67	1.1	0.8	0.33	0.51
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(8)	7.03E+01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(8)	1.17E+05	-	6.8	11	11	20	8.8	12	18	18	76	11	19	110	17	100	3.4	5.2
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(8)	2.97E+00	-	6.8	11	11	20	8.8	12	18	18	76	11	19	110	17	100	3.4	5.2
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	5.4	5.1	5	6.7	4.4	3.8	7.2	9.7	3.7	5.1	3.6	4.9	10	5.6	2.5	2.7
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(8)	4.69E+01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5	<0.5	<0.5
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(8)	5.48E+04	-	9000	17000	14000	23000	14000	11000	26000	19000	14000	13000	11000	14000	21000	14000	3200	7500
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	3.6	4.6	2.5	2	3.3	4.4	1.2	<1.25	4.6	2.7	1.7	12	<1.25	11	<0.25	0.37
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(8)	4.40E+02	-	570	510	590	720	510	530	1100	980	400	600	400	570	1400	350	320	340
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(8)	1.36E+01	-	0.038	0.015	<0.033	<0.033	0.01	0.024	<0.033	<0.033	0.29	0.15	0.23	0.28	<0.033	0.65	0.014	0.017
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(8)	1.56E+03	-	6.1	8.3	7.6	16	6.2	7.3	16	17	6.6	8	6	8.5	17	9.3	3.1	4.4
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(8)	3.91E+02	-	<12.5	<50	<12.5	<12.5	<12.5	<12.501	<12.5	<12.5	<2.5	<12.5	<2.5	<12.5	<12.5	<12.5	<2.5	<2.5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(8)	3.91E+02	-	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<0.25	<1.25	<0.25	<1.25	<1.25	<1.25	<0.25	<0.25
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(8)	3.91E+02	-	17	26	24	9.8	31	21	22	52	20	23	18	31	24	29	17	13
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(8)	2.35E+04	-	21	21	20	23	17	35	26	31	37	42	42	65	34	67	8.3	10
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(8)	7.59E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(8)	1.34E+03	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(8)	9.82E-02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(8)	5.14E-02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(8)	2.75E+00	-	<0.001	<0.001	0.000229	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(8)	5.36E+01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,1-Dichloropropene	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	<0.001	<0.001	<0.001	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(8)	1.15E-03	-	<0.001	<0.001	<0.001	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	<0.001	<0.001	<0.001	<0.001	<0.05	1.8	<0.001	0.011	6.2	<0.001	<0.05	4.3	<0.001	6.2	<0.001	<0.001
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(8)	5.07E-04	-	<0.002	<0.002	<0.002	<0.002	<0.1	<2	<0.002	<0.002	<2	<0.002	<0.1	<2	<0.002	<2	<0.002	<0.002
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(8)	7.10E-03	-	<0.001	<0.001	<0.001	<0.001	<0.05	0.17	<0.001	<0.001	0.29	<0.001	<0.05	0.31	<0.001	0.36	<0.001	<0.001
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(8)	1.64E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(8)	4.94E-01	-	<0.002	<0.002	<0.002	<0.002	<0.05	<1	<0.002	<0.002	0.16	<0.002	<0.05	<1	<0.002	0.17	<0.002	<0.002
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	<0.001	<0.001	<0.001	<0.001	<0.05	1.1	<0.001	0.00112	0.39	<0.001	<0.05	0.099	<0.001	0.49	<0.001	<0.001
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	0.000968	<0.003	0.000458	<0.004	0.065	4.7	<0.004	0.025	16	<0.004	0.015	16	<0.004	18	<0.004	<0.003
2,2-Dichloropropane	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(8)	5.87E+02	-	<0.002	<0.002	<0.002	<0.002	<0.5	<10	<0.005	0.00176	<10	<0.002	<0.5	<10	<0.002	<10	<0.005	0.000987
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(8)	2.57E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(8)	9.38E+02	-	<0.002	<0.002	<0.002	<0.002	<0.5	<10	<0.005	<0.005	<10	<0.002	<0.5	<10	<0.002	<10	<0.005	<0.004
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	0.00119	<0.003	<0.004	<0.004	0.082	5.6	<0.004	0.0197	17	<0.004	0.018	16	<0.004	23	<0.004	<0.003
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
4-Isopropyltoluene	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.05	0.3	<0.001	0.00112	0.45	<0.001	<0.05	0.39	<0.001	0.49	<0.001	<0.001
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	<0.002	<0.002	<0.002	<0.002	<0.5	<10	<0.005	<0.005	<10	<0.002	<0.5	<10	<0.002	<10	<0.005	<0.004
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(8)	1.78E+03	-	0.00305	0.003	0.00688	0.0065	<0.75	3.9	0.00794	0.0121	8.5	0.00398	0.027	9.3	0.00437	8.9	<0.028	0.0222
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(8)	7.96E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	0.1	<0.001	<0.001	0.22	<0.001	0.0068	0.14	<0.001	0.14	<0.001	<0.001
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(8)	1.25E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(8)	2.78E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-1 (0-0.5)	SWMU 14-1 (1.5-2)	SWMU 14-1 (10-12)	SWMU 14-1 (48-50')	SWMU 14-2 (0-0.5')	SWMU 14-2 (1.5-2.0')	SWMU 14-2 (16-18')	SWMU 14-2 (24-25')	SWMU 14-2 (8-10')	SWMU 14-3 (0-0.5')	SWMU 14-3 (1.5-2')	SWMU 14-3 (12-14')	SWMU 14-3 (25.5-26')	SWMU 14-3 (8-10')	SWMU 14-4 (0-0.5')	SWMU 14-4 (1.5-2.0')
									1207748-001	1207748-002	1207748-003	1207900-006	1207917-005	1207917-006	1207917-009	1207917-010	1207917-007	1207900-001	1207900-002	1207900-004	1207900-005	1207900-003	1207917-001	1207917-002
									7/16/2012	7/16/2012	7/16/2012	7/18/2012	7/17/2012	7/17/2012	7/17/2012	7/17/2012	7/17/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/17/2012	7/17/2012
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(8)	8.86E-01	-	-	-	-	-	<0.15	<3	-	-	<3	-	<0.15	<3	-	<3	-	-
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(8)	1.30E+02	-	<0.002	<0.002	<0.002	<0.002	0.025	<10	<0.005	<0.005	<10	<0.002	<0.5	<10	<0.002	<10	<0.005	<0.004
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(8)	7.39E-01	-	<0.001	<0.001	<0.001	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(8)	2.27E+01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(8)	2.48E+03	-	<0.001	<0.001	<0.001	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(8)	2.12E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(8)	2.03E+01	-	<0.001	<0.001	<0.001	0.000764	0.013	<3	<0.001	<0.001	<3	<0.001	<0.15	<3	0.000433	<3	<0.001	<0.001
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(8)	8.47E+00	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(8)	5.71E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(8)	1.52E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(8)	7.89E-01	-	<0.001	<0.001	<0.001	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(8)	1.49E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(8)	5.98E+00	-	<0.001	<0.001	<0.001	<0.001	<0.05	0.19	<0.001	0.000973	1.1	<0.001	<0.05	0.84	<0.001	0.75	<0.001	<0.001
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<0.001	<0.001	<0.001	<0.001	<0.1	<2	<0.001	<0.001	<2	<0.001	<0.1	<2	<0.001	<2	<0.001	<0.001
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(8)	3.99E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	0.000758	0.33	<0.001	<0.05	0.28	<0.001	0.3	<0.001	<0.001
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(8)	1.11E+01	-	<0.001	<0.001	0.0131	<0.001	<0.05	<1	<0.002	<0.002	<1	<0.001	<0.05	<1	<0.001	<1	<0.002	0.00107
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(8)	1.90E+01	-	0.00171	0.00159	0.00197	<0.002	<0.15	<3	<0.005	<0.005	<3	<0.002	0.0078	0.14	<0.002	0.12	<0.005	<0.004
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	<0.001	<0.001	<0.001	<0.001	<0.1	1.2	<0.001	0.00334	3	<0.001	0.013	2.2	<0.001	3.3	<0.001	<0.001
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	<0.001	<0.001	<0.001	<0.001	<0.05	0.27	<0.001	0.00168	0.66	<0.001	<0.05	0.67	<0.001	0.7	<0.001	<0.001
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	0.16	<0.001	0.00203	0.69	<0.001	<0.05	0.56	<0.001	0.56	<0.001	<0.001
sec-Butylbenzene	-	-	-	-	-	-	-	-	<0.001	<0.001	0.000388	<0.001	<0.05	0.15	<0.001	0.000903	0.34	<0.001	<0.05	0.29	<0.001	0.34	<0.001	<0.001
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(8)	6.40E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
tert-Butylbenzene	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(8)	1.98E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(8)	5.84E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(8)	1.24E+01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(8)	4.85E-01	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(8)	4.10E+02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	0.000331	<1	<0.001	<0.05	<1	<0.001	<1	0.000477	0.000596
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(8)	2.50E-02	-	<0.001	<0.001	<0.001	<0.001	<0.05	<1	<0.001	<0.001	<1	<0.001	<0.05	<1	<0.001	<1	<0.001	<0.001
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(8)	7.21E+01	-	<0.002	<0.002	<0.002	<0.002	<0.1	0.34	<0.003	<0.003	1	<0.002	<0.1	0.34	<0.002	1.1	<0.003	<0.003
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	<0.997	<1.001	0.49	<0.199	<0.198	5.9	<0.199	<0.2	16	<1.003	<0.998	9.2	<0.199	24	<0.399	<0.402
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(8)	4.78E+03	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(8)	4.78E+01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(8)	4.60E+01	-	<1.993	<2.002	<0.399	<0.398	<0.397	<1.991	<0.398	<0.4	<2.024	<2.005	<1.995	<2.006	<0.397	<4.003	<0.798	<0.803
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(8)	3.07E+02	-	<1.495	<1.502	<0.299	<0.298	<0.298	<1.494	<0.299	<0.3	<1.518	<1.504	<1.497	<1.505	<0.298	<3.002	<0.598	<0.602
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(8)	2.91E+01	-	0.45	0.45	<0.399	0.091	<0.397	0.56	<0.398	0.093	<2.024	0.46	0.45	<2.006	<0.397	<4.003	<0.798	<0.803
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(8)	1.04E+00	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(8)	1.77E+01	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(8)	4.01E-01	-	<1.246	<1.251	<0.249	<0.249	<0.248	<1.245	<0.249	<0.25	<1.265	<1.253	<1.247	<1.254	<0.248	<2.502	<0.499	<0.502
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(8)	5.33E+01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	<0.997	<1.001	<0.199	<0.199	<0.198	6.4	<0.199	<0.2	16	<1.003	<0.998	6	<0.199	29	<0.399	<0.402
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
2-Nitrophenol	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(8)	3.41E+00	-	<1.246	<1.251	<0.249	<0.249	<0.248	<1.245	<0.249	<0.25	<1.265	<1.253	<1.247	<1.254	<0.248	<2.502	<0.499	<0.502
3+4-Methylphenol	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
3-Nitroaniline	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-1 (0-0.5)	SWMU 14-1 (1.5-2)	SWMU 14-1 (10-12)	SWMU 14-1 (48-50')	SWMU 14-2 (0-0.5')	SWMU 14-2 (1.5-2.0')	SWMU 14-2 (16-18')	SWMU 14-2 (24-25')	SWMU 14-2 (8-10')	SWMU 14-3 (0-0.5')	SWMU 14-3 (1.5-2')	SWMU 14-3 (12-14')	SWMU 14-3 (25.5-26')	SWMU 14-3 (8-10')	SWMU 14-4 (0-0.5')	SWMU 14-4 (1.5-2.0')
									1207748-001	1207748-002	1207748-003	1207900-006	1207917-005	1207917-006	1207917-009	1207917-010	1207917-007	1207900-001	1207900-002	1207900-004	1207900-005	1207900-003	1207917-001	1207917-002
									7/16/2012	7/16/2012	7/16/2012	7/18/2012	7/17/2012	7/17/2012	7/17/2012	7/17/2012	7/17/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/17/2012	7/17/2012
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
4-Chloroaniline	2.40E+01	(3)	8.60E+00	(6)	5.99E-02	(8)	5.99E-02	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
4-Nitroaniline	2.40E+02	(3)	8.60E+01	(6)	6.45E-01	(8)	6.45E-01	-	<1.993	<2.002	<0.399	<0.398	<0.397	<1.991	<0.398	<0.4	<2.024	<2.005	<1.995	<2.006	<0.397	<4.003	<0.798	<0.803
4-Nitrophenol	-	-	-	-	-	-	-	-	<1.246	<1.251	<0.249	<0.249	<0.248	<1.245	<0.249	<0.25	<1.265	<1.253	<1.247	<1.254	<0.248	<2.502	<0.499	<0.502
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(8)	3.44E+03	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	2	<0.399	<0.402
Acenaphthylene	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Aniline	8.50E+02	(3)	3.00E+02	(6)	1.80E+00	(8)	1.80E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(8)	1.72E+04	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Azobenzene	5.10E+01	(3)	2.30E+01	(6)	3.69E-01	(8)	3.69E-01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(8)	1.48E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(8)	1.48E-01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(8)	1.48E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(8)	1.48E+01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	0.088	<2.53	<2.507	0.52	1.7	<0.497	<5.003	<0.997	<1.004
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(8)	1.21E-02	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(8)	1.07E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(8)	3.47E+02	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	0.11	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	0.24	<1.004
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+02	(6)	9.22E+01	(8)	9.22E+01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Carbazole	-	-	-	-	-	-	-	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(8)	1.48E+02	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(8)	1.48E-01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(8)	4.45E+03	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(8)	3.71E+04	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(8)	3.21E+03	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	<1.246	<1.251	<0.249	<0.249	<0.248	<1.245	<0.249	<0.25	<1.265	<1.253	<1.247	<1.254	<0.248	<2.502	<0.499	<0.502
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(8)	2.29E+03	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(8)	2.29E+03	-	<0.997	<1.001	<0.199	<0.199	<0.198	1.8	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(8)	1.83E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(8)	2.43E+02	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(8)	3.77E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(8)	1.48E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(8)	8.84E+01	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	<0.997	<1.001	<0.199	<0.199	<0.198	1	<0.199	<0.2	2.5	<1.003	<0.998	0.71	<0.199	3.8	<0.399	<0.402
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(8)	2.88E-01	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E-01	(6)	3.23E-03	(8)	3.23E-03	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(8)	2.61E+02	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(8)	5.90E+00	-	<1.993	<2.002	<0.399	<0.398	<0.397	<1.991	<0.398	<0.4	<2.024	<2.005	<1.995	<2.006	<0.397	<4.003	<0.798	<0.803
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(8)	1.83E+03	-	<0.997	<1.001	0.57	<0.199	<0.198	3.2	<0.199	<0.2	3	<1.003	<0.998	2.2	<0.199	4.8	<0.399	<0.402
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(8)	2.29E+03	-	<0.997	<1.001	<0.199	<0.199	<0.198	<0.996	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(8)	1.72E+03	-	<0.997	<1.001	<0.199	<0.199	<0.198	0.93	<0.199	<0.2	<1.012	<1.003	<0.998	<1.003	<0.199	<2.001	<0.399	<0.402
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	<2.492	<2.503	<0.498	<0.497	<0.496	<2.489	<0.498	<0.5	<2.53	<2.507	<2.494	<2.508	<0.497	<5.003	<0.997	<1.004
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	33	30	220	<10	53	**6200**	34	<10	**3300**	640	280	920	<10	**2000**	88	39
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	<5	<5	1.7	<5	2.8	150	1.3	<5	210	<20	<10	90	<5	84	<10	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	<49	<50	<50	<51	<50	<980	<48	<51	<974	<995	310	<964	<49	<1005	56	<51

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-1 (0-0.5)	SWMU 14-1 (1.5-2)	SWMU 14-1 (10-12)	SWMU 14-1 (48-50')	SWMU 14-2 (0-0.5')	SWMU 14-2 (1.5-2.0')	SWMU 14-2 (16-18')	SWMU 14-2 (24-25')	SWMU 14-2 (8-10')	SWMU 14-3 (0-0.5')	SWMU 14-3 (1.5-2')	SWMU 14-3 (12-14')	SWMU 14-3 (25.5-26')	SWMU 14-3 (8-10')	SWMU 14-4 (0-0.5')	SWMU 14-4 (1.5-2.0')
									1207748-001	1207748-002	1207748-003	1207900-006	1207917-005	1207917-006	1207917-009	1207917-010	1207917-007	1207900-001	1207900-002	1207900-004	1207900-005	1207900-003	1207917-001	1207917-002
									7/16/2012	7/16/2012	7/16/2012	7/18/2012	7/17/2012	7/17/2012	7/17/2012	7/17/2012	7/17/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/17/2012	7/17/2012

EPA - Regional Screening Levels (November 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (Nov. 2012)

(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461

(8) SoilGW Risk-based EPA DAF = 461

(9) SoilGW MCL-based EPA DAF = 461

(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level

yellow highlight represents value above Leachate (DAF) Screening Level

Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-4 (10-12')	SWMU 14-4 (19.5-20')	SWMU 14-5 (0-0.5')	SWMU 14-5 (1.5-2.0')	SWMU 14-6 (0-0.5')	SWMU 14-6 (1.5-2')	SWMU 14-6 (10-12')	SWMU 14-6 (17-18')	SWMU 14-7 (0-0.5')	SWMU 14-7 (1.5-2')	SWMU 14-7 (23.5-24')	SWMU 14-7 (6-8')	SWMU 14-8 (0-0.5')	SWMU 14-8 (1.5-2.0')	SWMU 14-9 (0-0.5')	SWMU 14-9 (1.5-2')
									1207917-003	1207917-004	1207940-016	1207940-018	1210582-001	1210582-002	1210582-003	1210582-004	1207922-006	1207922-007	1207922-009	1207922-008	1207940-003	1207940-004	1207922-001	1207922-003
									7/17/2012	7/17/2012	7/19/2012	7/19/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/19/2012	7/19/2012	7/18/2012	7/18/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(8)	3.13E+01	-	<12.5	<12.5	<12.5	3.4	<12.5	<12.5	<12.5	<12.5	5.3	<12.501	4.5	4.6	4.5	<12.5	<12.499	<12.5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(8)	3.90E+00	-	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(8)	4.35E+03	-	460	480	490	340	350	330	340	290	650	550	350	2400	610	690	480	500
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(8)	1.44E+02	-	0.86	1.3	0.68	0.61	1	0.78	0.83	0.87	0.76	0.68	1.2	1.2	0.77	0.88	0.58	0.52
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(8)	7.03E+01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(8)	1.17E+05	-	12	22	63	11	9.7	23	9.1	8.9	9.6	7.1	17	14	16	10	13	10
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(8)	2.97E+00	-	12	22	63	11	9.7	23	9.1	8.9	9.6	7.1	17	14	16	10	13	10
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	5	8	5.3	4.6	5	4.5	4.7	5.6	4.1	3.7	7.6	6	5	4.7	3.8	3.1
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(8)	4.69E+01	-	<0.5	<0.5	0.6	<0.5	<0.3	<0.3	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(8)	5.48E+04	-	16000	23000	18000	13000	15000	13000	13000	16000	15000	11000	21000	20000	15000	13000	14000	8800
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	2.4	1.4	14	2.5	6.4	5.6	4.5	2.9	3.5	3.2	<1.25	2.6	6.2	5	5.5	1.9
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(8)	4.40E+02	-	720	1000	550	450	420	370	340	1100	600	1100	740	400	470	190	1800	930
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(8)	1.36E+01	-	<0.033	<0.033	0.27	0.011	<0.033	0.095	<0.033	<0.033	0.0068	<0.033	<0.033	<0.033	0.041	<0.033	0.68	0.09
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(8)	1.56E+03	-	8.6	17	9.8	7.1	8.2	7.1	7.6	11	6.8	5.6	16	11	7.4	7.9	6.3	5.9
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(8)	3.91E+02	-	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.501	<12.5	<12.501	<12.5	<12.5	<12.499	<12.5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(8)	3.91E+02	-	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(8)	3.91E+02	-	25	15	26	26	17	23	21	<12.5	22	18	16	27	25	18	18	19
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(8)	2.35E+04	-	22	25	190	20	17	26	16	17	30	12	25	22	33	15	44	28
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(8)	7.59E-01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(8)	1.34E+03	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(8)	9.82E-02	-	<1	<0.001	0.00104	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	0.00043	<0.5
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(8)	5.14E-02	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(8)	2.75E+00	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	0.000918	<2	<0.001	<1
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(8)	5.36E+01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,1-Dichloropropene	-	-	-	-	-	-	-	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	<0.001	<2	<0.001	<1
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	<0.001	<2	<0.001	<1
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(8)	1.15E-03	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	<0.001	<2	<0.001	<1
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	7.8	<0.001	<0.001	<0.05	0.00104	<0.0008	13	0.00148	0.32	0.00562	<0.001	12	<0.001	6.7	0.002	1.5
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(8)	5.07E-04	-	<2	<0.002	<0.002	<0.1	<0.001	<0.0008	<1	<0.0011	0.18	0.000593	<0.002	<2	<0.002	<2	<0.002	<1
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(8)	7.10E-03	-	0.3	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	0.22	<0.001	<0.001	0.41	<0.001	0.31	<0.001	<0.5
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(8)	1.64E-01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(8)	4.94E-01	-	0.15	<0.002	<0.002	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.002	<0.002	0.14	<0.002	0.23	<0.002	<0.5
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	1.7	<0.001	<0.001	<0.05	<0.001	<0.0008	4.2	<0.0011	0.19	0.00487	<0.001	1.7	<0.001	2.2	0.000458	0.46
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	0.000252	<1	<0.001	<0.5
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	45	<0.004	<0.005	0.021	<0.004	<0.0032	14	<0.0043	0.66	0.00502	<0.004	7.2	<0.003	2	0.0674	0.58
2,2-Dichloropropane	-	-	-	-	-	-	-	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	<0.001	<2	<0.001	<1
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(8)	5.87E+02	-	<10	0.00143	<0.006	<0.5	<0.0101	<0.0081	<5	<0.0108	<10	<0.002	<0.002	<10	0.00321	<10	<0.002	<5
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(8)	2.57E+02	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	0.12	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(8)	9.38E+02	-	<10	<0.005	<0.006	<0.5	<0.0101	<0.0081	<5	<0.0108	<10	<0.002	<0.002	<10	<0.004	<10	<0.002	<5
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	90	<0.004	<0.005	0.024	<0.004	<0.0032	25	<0.0043	0.67	0.00402	<0.004	12	<0.003	2.3	0.107	0.65
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
4-Isopropyltoluene	-	-	-	-	-	-	-	-	0.53	<0.001	<0.001	<0.05	<0.001	<0.0008	0.57	<0.0011	0.095	0.0017	<0.001	0.73	<0.001	0.44	<0.001	0.056
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	<10	<0.005	<0.006	<0.5	<0.0101	<0.0081	<5	<0.0108	<10	<0.002	<0.002	<10	<0.004	<10	<0.002	<5
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(8)	1.78E+03	-	6.5	0.00793	0.0181	0.11	0.0973	0.0187	<7.5	<0.0108	3.7	<0.009	0.00266	8.2	0.014	7.1	0.00307	<7.5
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(8)	7.96E-01	-	0.34	<0.001	<0.001	<0.05	0.00291	<0.0008	0.96	0.00909	<1	0.0126	<0.001	0.97	0.0122	0.35	<0.001	0.06
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(8)	1.25E-01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(8)	2.78E+02	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-4 (10-12')	SWMU 14-4 (19.5-20')	SWMU 14-5 (0-0.5')	SWMU 14-5 (1.5-2.0')	SWMU 14-6 (0-0.5')	SWMU 14-6 (1.5-2')	SWMU 14-6 (10-12')	SWMU 14-6 (17-18')	SWMU 14-7 (0-0.5')	SWMU 14-7 (1.5-2')	SWMU 14-7 (23.5-24')	SWMU 14-7 (6-8')	SWMU 14-8 (0-0.5')	SWMU 14-8 (1.5-2.0')	SWMU 14-9 (0-0.5')	SWMU 14-9 (1.5-2')
									1207917-003	1207917-004	1207940-016	1207940-018	1210582-001	1210582-002	1210582-003	1210582-004	1207922-006	1207922-007	1207922-009	1207922-008	1207940-003	1207940-004	1207922-001	1207922-003
									7/17/2012	7/17/2012	7/19/2012	7/19/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/19/2012	7/19/2012	7/18/2012	7/18/2012
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(8)	8.86E-01	-	<3	-	-	<0.15	<0.001	<0.0008	<1.5	<0.0011	<3	-	-	<3	-	<3	-	<1.5
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(8)	1.30E+02	-	<10	<0.005	<0.006	<0.5	<0.0101	<0.0081	<5	<0.0108	<10	0.000629	<0.002	<10	<0.004	<10	<0.002	<5
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(8)	7.39E-01	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	<0.001	<2	<0.001	<1
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(8)	2.27E+01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	0.000323	<0.001	<1	<0.001	<1	<0.001	<0.5
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(8)	2.48E+03	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	<0.001	<2	<0.001	<1
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(8)	2.12E-01	-	<1	<0.001	<0.001	0.006	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(8)	2.03E+01	-	<3	<0.001	<0.001	<0.15	<0.001	<0.0008	<1.5	<0.0011	<3	<0.001	<0.001	<3	0.00053	<3	<0.001	<1.5
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(8)	8.47E+00	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(8)	5.71E-01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(8)	1.52E-01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(8)	7.89E-01	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	<0.001	<2	<0.001	<1
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(8)	1.49E+02	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(8)	5.98E+00	-	1.4	<0.001	<0.001	<0.05	0.00157	<0.0008	7.5	0.00134	<1	0.00691	<0.001	3.1	<0.001	3.8	0.000542	0.35
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<2	<0.001	<0.001	<0.1	<0.001	<0.0008	<1	<0.0011	<2	<0.001	<0.001	<2	<0.001	<2	<0.001	<1
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(8)	3.99E+02	-	0.58	<0.001	<0.001	<0.05	<0.001	<0.0008	1.7	<0.0011	<1	0.00208	<0.001	0.84	<0.001	0.97	<0.001	0.064
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(8)	1.11E+01	-	<1	<0.002	<0.002	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	0.0102	<0.001	0.8	0.00157	<1	<0.001	<0.5
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(8)	1.90E+01	-	<3	<0.005	<0.006	0.042	<0.003	0.0173	<1.5	0.031	<3	<0.002	<0.002	<3	<0.004	<3	<0.002	<1.5
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	9.2	<0.001	<0.001	0.016	<0.002	<0.0016	9.1	<0.0022	0.35	0.00218	<0.001	3.9	<0.001	1.1	0.0183	0.3
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	1	<0.001	<0.001	<0.05	<0.001	<0.0008	2	<0.0011	0.15	0.00116	<0.001	1.6	<0.001	0.58	0.000177	0.1
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	0.89	<0.001	<0.001	<0.05	<0.001	<0.0008	3.3	<0.0011	<1	0.00257	<0.001	2	<0.001	1.4	<0.001	0.17
sec-Butylbenzene	-	-	-	-	-	-	-	-	0.48	<0.001	<0.001	<0.05	<0.001	<0.0008	1.2	<0.0011	<1	0.00203	<0.001	0.86	<0.001	0.47	<0.001	<0.5
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(8)	6.40E+02	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	0.077
tert-Butylbenzene	-	-	-	-	-	-	-	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(8)	1.98E-01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(8)	5.84E+02	-	<1	<0.001	0.000344	<0.05	0.00336	<0.0008	<0.5	0.00596	<1	<0.001	<0.001	0.75	0.000743	1.4	0.000262	0.14
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(8)	1.24E+01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(8)	4.85E-01	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(8)	4.10E+02	-	<1	0.000301	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(8)	2.50E-02	-	<1	<0.001	<0.001	<0.05	<0.001	<0.0008	<0.5	<0.0011	<1	<0.001	<0.001	<1	<0.001	<1	<0.001	<0.5
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(8)	7.21E+01	-	0.56	<0.003	<0.004	<0.1	0.00786	<0.0016	12	0.0046	<2	0.00795	<0.002	8.1	<0.003	9.3	0.00282	2.4
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	29	<0.199	<0.996	<0.198	<0.3995	<0.397	12	<0.1996	<1.008	<0.403	<0.199	6.5	<1.002	3.6	1.5	<0.994
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(8)	4.78E+03	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(8)	4.78E+01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(8)	4.60E+01	-	<0.797	<0.398	<1.992	<0.397	<0.7989	<0.7939	<0.7921	<0.3992	<2.017	<0.805	<0.399	<0.797	<2.003	<1.995	<1.982	<1.988
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(8)	3.07E+02	-	<0.597	<0.299	<1.494	<0.298	<0.5992	<0.5954	<0.5941	<0.2994	<1.513	<0.604	<0.299	<0.597	<1.503	<1.497	<1.486	<1.491
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(8)	2.91E+01	-	0.2	0.09	<1.992	<0.397	<0.7989	<0.7939	<0.7921	<0.3992	<2.017	0.19	0.091	<0.797	<2.003	0.56	<1.982	0.46
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(8)	1.04E+00	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(8)	1.77E+01	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(8)	4.01E-01	-	<0.498	<0.249	<1.245	<0.248	<0.4993	<0.4962	<0.495	<0.2495	<1.261	<0.503	<0.249	<0.498	<1.252	<1.247	<1.238	<1.243
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(8)	5.33E+01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	46	<0.199	<0.996	<0.198	<0.3995	<0.397	17	<0.1996	<1.008	<0.403	<0.199	9.2	<1.002	4.2	1.9	<0.994
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
2-Nitrophenol	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(8)	3.41E+00	-	<0.498	<0.249	<1.245	<0.248	<0.4993	<0.4962	<0.495	<0.2495	<1.261	<0.503	<0.249	<0.498	<1.252	<1.247	<1.238	<1.243
3+4-Methylphenol	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	0.4	<0.994
3-Nitroaniline	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-4 (10-12')	SWMU 14-4 (19.5-20')	SWMU 14-5 (0-0.5')	SWMU 14-5 (1.5-2.0')	SWMU 14-6 (0-0.5')	SWMU 14-6 (1.5-2')	SWMU 14-6 (10-12')	SWMU 14-6 (17-18')	SWMU 14-7 (0-0.5')	SWMU 14-7 (1.5-2')	SWMU 14-7 (23.5-24')	SWMU 14-7 (6-8')	SWMU 14-8 (0-0.5')	SWMU 14-8 (1.5-2.0')	SWMU 14-9 (0-0.5')	SWMU 14-9 (1.5-2')
									1207917-003	1207917-004	1207940-016	1207940-018	1210582-001	1210582-002	1210582-003	1210582-004	1207922-006	1207922-007	1207922-009	1207922-008	1207940-003	1207940-004	1207922-001	1207922-003
									7/17/2012	7/17/2012	7/19/2012	7/19/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/19/2012	7/19/2012	7/18/2012	7/18/2012
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
4-Chloroaniline	2.40E+01	(3)	8.60E+00	(6)	5.99E-02	(8)	5.99E-02	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
4-Nitroaniline	2.40E+02	(3)	8.60E+01	(6)	6.45E-01	(8)	6.45E-01	-	<0.797	<0.398	<1.992	<0.397	<0.7989	<0.7939	<0.7921	<0.3992	<2.017	<0.805	<0.399	<0.797	<2.003	<1.995	<1.982	<1.988
4-Nitrophenol	-	-	-	-	-	-	-	-	<0.498	<0.249	<1.245	<0.248	<0.4993	<0.4962	<0.495	<0.2495	<1.261	<0.503	<0.249	<0.498	<1.252	<1.247	<1.238	<1.243
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(8)	3.44E+03	-	1	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Acenaphthylene	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Aniline	8.50E+02	(3)	3.00E+02	(6)	1.80E+00	(8)	1.80E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(8)	1.72E+04	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Azobenzene	5.10E+01	(3)	2.30E+01	(6)	3.69E-01	(8)	3.69E-01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(8)	1.48E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(8)	1.48E-01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(8)	1.48E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(8)	1.48E+01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	<0.996	<0.498	0.44	<0.496	<0.9987	<0.9924	<0.9901	<0.499	1.2	<1.007	<0.498	<0.996	<2.504	2.3	0.59	0.5
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(8)	1.21E-02	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(8)	1.07E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(8)	3.47E+02	-	0.52	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	2.6	<2.485
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+02	(6)	9.22E+01	(8)	9.22E+01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Carbazole	-	-	-	-	-	-	-	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(8)	1.48E+02	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(8)	1.48E-01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(8)	4.45E+03	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(8)	3.71E+04	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(8)	3.21E+03	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	<0.498	<0.249	<1.245	<0.248	<0.4993	<0.4962	<0.495	<0.2495	<1.261	<0.503	<0.249	<0.498	<1.252	<1.247	<1.238	<1.243
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(8)	2.29E+03	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(8)	2.29E+03	-	1.4	<0.199	<0.996	<0.198	<0.3995	<0.397	1.2	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(8)	1.83E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(8)	2.43E+02	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(8)	3.77E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(8)	1.48E+00	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(8)	8.84E+01	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	4	<0.199	<0.996	<0.198	<0.3995	<0.397	4.2	<0.1996	<1.008	<0.403	<0.199	2.2	<1.002	1.5	<0.991	<0.994
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(8)	2.88E-01	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E-01	(6)	3.23E-03	(8)	3.23E-03	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(8)	2.61E+02	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(8)	5.90E+00	-	<0.797	<0.398	<1.992	<0.397	<0.7989	<0.7939	<0.7921	<0.3992	<2.017	<0.805	<0.399	<0.797	<2.003	<1.995	<1.982	<1.988
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(8)	1.83E+03	-	3.3	<0.199	<0.996	<0.198	<0.3995	<0.397	2.6	<0.1996	<1.008	<0.403	<0.199	2	<1.002	1.1	1.7	<0.994
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(8)	2.29E+03	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	<0.398	<1.002	<0.998	<0.991	<0.994
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(8)	1.72E+03	-	<0.398	<0.199	<0.996	<0.198	<0.3995	<0.397	<0.396	<0.1996	<1.008	<0.403	<0.199	0.25	<1.002	0.6	<0.991	<0.994
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	<0.996	<0.498	<2.49	<0.496	<0.9987	<0.9924	<0.9901	<0.499	<2.521	<1.007	<0.498	<0.996	<2.504	<2.494	<2.477	<2.485
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	610	<10	300	53	<10	260	**2200**	<10	**3900**	**2100**	<10	1000	550	**4300**	1000	**1200**
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	67	4	5.4	<5	<5	<5	220	<5	<250	15	3.4	150	7.9	170	20	<50
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	<510	<51	240	<51	<52	320	<482	<50	<994	<486	<50	<499	<1010	<994	<990	<988

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-4 (10-12')	SWMU 14-4 (19.5-20')	SWMU 14-5 (0-0.5')	SWMU 14-5 (1.5-2.0')	SWMU 14-6 (0-0.5')	SWMU 14-6 (1.5-2')	SWMU 14-6 (10-12')	SWMU 14-6 (17-18')	SWMU 14-7 (0-0.5')	SWMU 14-7 (1.5-2')	SWMU 14-7 (23.5-24')	SWMU 14-7 (6-8')	SWMU 14-8 (0-0.5')	SWMU 14-8 (1.5-2.0')	SWMU 14-9 (0-0.5')	SWMU 14-9 (1.5-2')
									1207917-003	1207917-004	1207940-016	1207940-018	1210582-001	1210582-002	1210582-003	1210582-004	1207922-006	1207922-007	1207922-009	1207922-008	1207940-003	1207940-004	1207922-001	1207922-003
									7/17/2012	7/17/2012	7/19/2012	7/19/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/19/2012	7/19/2012	7/18/2012	7/18/2012

EPA - Regional Screening Levels (November 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (Nov. 2012)

(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461

(8) SoilGW Risk-based EPA DAF = 461

(9) SoilGW MCL-based EPA DAF = 461

(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level

yellow highlight represents value above Leachate (DAF) Screening Level

Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-9 (13-14')	SWMU 14-9 (4-6')	SWMU 14-10 (0-0.5')	SWMU 14-10 (1.5-2.0')	SWMU 14-11 (0-0.5')	SWMU 14-11 (1.5-2.0')	SWMU 14-12 (0-0.5')	SWMU 14-12 (1.5-2.0')	SWMU 14-13 (0-0.5')	SWMU 14-13 (1.5-2.0')	SWMU 14-14 (0-0.5')	SWMU 14-14 (1.5-2.0')	SWMU 14-15 (0-0.5')	SWMU 14-15 (1.5-2.0')	SWMU 14-16 (0-0.5')	SWMU 14-16 (1.5-2.0')
									1207922-005	1207922-004	1207940-001	1207940-002	1207940-012	1207940-013	1207940-006	1207940-007	1207940-008	1207940-009	1207940-010	1207940-011	1207940-025	1207940-026	1207940-023	1207940-024
									7/18/2012	7/18/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(8)	3.13E+01	-	4.5	<12.501	3.3	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(8)	3.90E+00	-	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(8)	4.35E+03	-	190	200	430	430	590	620	150	120	350	230	980	190	670	650	550	1000
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(8)	1.44E+02	-	1.3	1.1	0.89	0.83	0.83	0.84	1	0.95	0.97	1	0.93	1	0.67	0.51	0.62	0.73
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(8)	7.03E+01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(8)	1.17E+05	-	19	12	23	23	21	17	12	12	17	13	18	11	14	8.9	13	15
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(8)	2.97E+00	-	19	12	23	23	21	17	12	12	17	13	18	11	14	8.9	13	15
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	6.5	4.9	5.4	5.1	5.4	4.9	5.9	5.3	5.7	5.7	5.7	4.9	4.7	3.6	4.4	4.5
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(8)	4.69E+01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(8)	5.48E+04	-	23000	16000	15000	14000	14000	15000	15000	15000	8400	16000	16000	14000	12000	7300	11000	15000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	<1.25	2.4	7.7	6.8	7	5.8	4.4	2.6	2	3.3	3.3	2.9	4.1	1.3	4.8	5.1
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(8)	4.40E+02	-	460	280	510	530	550	700	240	300	340	390	350	240	540	360	1100	560
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(8)	1.36E+01	-	<0.033	<0.033	0.32	0.21	0.14	0.058	0.04	0.097	0.14	<0.033	0.33	0.0074	0.13	0.22	0.062	0.052
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(8)	1.56E+03	-	13	8.5	9.3	8.8	9.7	7.9	9.8	8.7	9.1	9.5	9.1	8.1	8.2	5.6	6.9	7.1
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(8)	3.91E+02	-	<12.5	<12.501	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(8)	3.91E+02	-	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(8)	3.91E+02	-	29	20	25	23	25	24	23	22	26	23	27	21	23	20	22	25
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(8)	2.35E+04	-	27	17	49	43	59	38	18	18	36	19	34	19	140	68	69	25
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(8)	7.59E-01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(8)	1.34E+03	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(8)	9.82E-02	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(8)	5.14E-02	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(8)	2.75E+00	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(8)	5.36E+01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,1-Dichloropropene	-	-	-	-	-	-	-	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(8)	1.15E-03	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	<0.001	3.2	<0.001	<0.001	<0.001	0.000507	38	22	3.7	3.5	38	4.8	<0.001	44	<0.001	3.6
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(8)	5.07E-04	-	<0.002	<1	<0.002	<0.002	<0.002	<0.003	**2.2**	<5	<2	<1	<5	<1	<0.002	<5	<0.002	<2
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(8)	7.10E-03	-	<0.001	0.12	<0.001	<0.001	<0.001	<0.001	**0.82**	0.56	0.15	0.14	**1**	0.17	<0.001	<2.5	<0.001	0.21
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(8)	1.64E-01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(8)	4.94E-01	-	<0.002	<0.5	<0.002	<0.002	<0.002	<0.003	0.6	0.46	<1	<0.5	0.48	0.089	<0.002	<2.5	<0.002	<1
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	<0.001	0.92	<0.001	<0.001	<0.001	0.00726	11	6.3	1.4	0.93	12	0.87	<0.001	16	<0.001	1.1
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.001	<0.5	<0.001	0.000221	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	<0.005	2.9	0.002	<0.004	<0.004	0.0152	29	21	12	2.6	31	3.3	<0.004	6.7	<0.004	12
2,2-Dichloropropane	-	-	-	-	-	-	-	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(8)	5.87E+02	-	<0.002	<5	0.002	<0.004	<0.005	<0.006	<25	<25	<10	<5	<25	<5	<0.005	<25	<0.005	<10
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(8)	2.57E+02	-	<0.001	0.049	<0.001	<0.001	<0.001	<0.001	0.26	<2.5	<1	0.053	0.46	<0.5	<0.001	<2.5	<0.001	0.11
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(8)	9.38E+02	-	<0.002	<5	<0.005	<0.004	<0.005	<0.006	<25	<25	<10	<5	<25	<5	<0.005	<25	<0.005	0.37
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	0.000628	4.7	0.00182	0.000302	<0.004	0.00211	50	36	13	4.6	55	6.1	<0.004	9.8	<0.004	9.6
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
4-Isopropyltoluene	-	-	-	-	-	-	-	-	<0.001	0.15	<0.001	<0.001	<0.001	0.000723	2.1	1.3	0.38	0.22	1.7	0.29	<0.001	3.4	<0.001	0.27
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	<0.002	<5	<0.005	<0.004	<0.005	<0.006	<25	<25	<10	<5	<25	<5	<0.005	<25	<0.005	<10
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(8)	1.78E+03	-	0.00673	<7.5	0.0158	<0.026	<0.029	<0.038	<37.5	47	4.1	3.6	13	3.8	<0.029	35	<0.027	4.1
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(8)	7.96E-01	-	<0.001	0.69	0.00072	<0.001	<0.001	<0.001	5.9	2.9	<1	0.48	<2.5	0.84	<0.001	2.8	<0.001	0.46
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(8)	1.25E-01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(8)	2.78E+02	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-9 (13-14')	SWMU 14-9 (4-6')	SWMU 14-10 (0-0.5')	SWMU 14-10 (1.5-2.0')	SWMU 14-11 (0-0.5')	SWMU 14-11 (1.5-2.0')	SWMU 14-12 (0-0.5')	SWMU 14-12 (1.5-2.0')	SWMU 14-13 (0-0.5')	SWMU 14-13 (1.5-2.0')	SWMU 14-14 (0-0.5')	SWMU 14-14 (1.5-2.0')	SWMU 14-15 (0-0.5')	SWMU 14-15 (1.5-2.0')	SWMU 14-16 (0-0.5')	SWMU 14-16 (1.5-2.0')
									1207922-005	1207922-004	1207940-001	1207940-002	1207940-012	1207940-013	1207940-006	1207940-007	1207940-008	1207940-009	1207940-010	1207940-011	1207940-025	1207940-026	1207940-023	1207940-024
									7/18/2012	7/18/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(8)	8.86E-01	-	-	<1.5	-	-	-	-	<7.5	<7.5	<3	<1.5	<7.5	<1.5	-	<7.5	-	<3
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(8)	1.30E+02	-	<0.002	<5	0.00144	<0.004	<0.005	<0.006	<25	<25	<10	<5	<25	<5	<0.005	<25	<0.005	<10
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(8)	7.39E-01	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(8)	2.27E+01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(8)	2.48E+03	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(8)	2.12E-01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(8)	2.03E+01	-	<0.001	<1.5	<0.001	<0.001	<0.001	<0.001	<7.5	<7.5	<3	<1.5	<7.5	<1.5	<0.001	<7.5	<0.001	<3
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(8)	8.47E+00	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(8)	5.71E-01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(8)	1.52E-01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(8)	7.89E-01	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(8)	1.49E+02	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(8)	5.98E+00	-	<0.001	1.1	<0.001	<0.001	<0.001	<0.001	17	7.5	0.47	1.3	4.3	1.7	<0.001	23	<0.001	0.67
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<5	<5	<2	<1	<5	<1	<0.001	<5	<0.001	<2
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(8)	3.99E+02	-	<0.001	0.19	<0.001	<0.001	<0.001	<0.001	3	1.6	0.2	0.28	1.6	0.39	<0.001	6.6	<0.001	0.13
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(8)	1.11E+01	-	<0.001	0.1	<0.002	<0.002	<0.002	<0.003	0.83	1.5	<1	0.19	<2.5	0.2	<0.002	<2.5	<0.002	<1
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(8)	1.90E+01	-	<0.002	<1.5	<0.005	<0.004	<0.005	<0.006	<7.5	0.31	<3	0.24	0.35	0.24	<0.005	2	<0.005	0.63
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	<0.001	1.1	0.00069	<0.001	<0.001	<0.001	16	10	1.8	1.2	11	1.4	<0.001	3.6	<0.001	3.9
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	<0.001	0.28	<0.001	<0.001	<0.001	<0.001	4	2.4	0.66	0.4	3.3	0.51	<0.001	3.8	<0.001	0.31
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	<0.001	0.45	<0.001	<0.001	<0.001	<0.001	6.2	3.6	0.47	0.55	4	0.73	<0.001	8.1	<0.001	0.22
sec-Butylbenzene	-	-	-	-	-	-	-	-	<0.001	0.15	<0.001	<0.001	<0.001	<0.001	2.4	1.4	0.28	0.23	1.6	0.3	<0.001	3.8	<0.001	0.17
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(8)	6.40E+02	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
tert-Butylbenzene	-	-	-	-	-	-	-	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(8)	1.98E-01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(8)	5.84E+02	-	<0.001	2.8	0.00292	0.000892	<0.001	<0.001	45	14	0.15	0.61	1.3	0.83	<0.001	<2.5	0.00033	<1
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(8)	1.24E+01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(8)	4.85E-01	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(8)	4.10E+02	-	<0.001	<0.5	<0.001	0.000219	<0.001	0.000685	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(8)	2.50E-02	-	<0.001	<0.5	<0.001	<0.001	<0.001	<0.001	<2.5	<2.5	<1	<0.5	<2.5	<0.5	<0.001	<2.5	<0.001	<1
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(8)	7.21E+01	-	<0.002	5.6	<0.003	<0.003	<0.003	<0.004	86	36	2.4	5.5	45	5.3	<0.003	120	<0.003	1.1
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	<0.202	5.1	<1.006	<0.989	<0.997	<1.004	21	5.2	1.6	1.4	18	17	<1.003	4.4	<1.006	6.3
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(8)	4.78E+03	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(8)	4.78E+01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(8)	4.60E+01	-	<0.403	<0.803	<2.011	<1.978	<1.995	<2.009	<0.801	<0.805	<0.401	<0.398	<2.004	<1.983	<2.005	<1.996	<2.012	<2
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(8)	3.07E+02	-	<0.303	0.52	<1.509	<1.484	<1.496	<1.507	<0.601	<0.603	<0.301	0.29	<1.503	<1.488	<1.504	<1.497	<1.509	<1.5
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(8)	2.91E+01	-	<0.403	<0.803	<2.011	<1.978	<1.995	<2.009	<0.801	<0.805	0.16	0.12	0.59	0.66	<2.005	0.49	0.46	<2
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(8)	1.04E+00	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(8)	1.77E+01	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(8)	4.01E-01	-	<0.252	<0.502	<1.257	<1.236	<1.247	<1.255	<0.501	<0.503	<0.251	<0.249	<1.253	<1.24	<1.253	<1.248	<1.258	<1.25
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(8)	5.33E+01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	<0.202	8	<1.006	<0.989	<0.997	<1.004	32	7.7	0.81	2.3	28	27	<1.003	6.7	<1.006	6.1
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	<0.504	0.33	<2.514	<2.473	<2.493	<2.511	<1.001	1.1	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
2-Nitrophenol	-	-	-	-	-	-	-	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(8)	3.41E+00	-	<0.252	<0.502	<1.257	<1.236	<1.247	<1.255	<0.501	<0.503	<0.251	<0.249	<1.253	<1.24	<1.253	<1.248	<1.258	<1.25
3+4-Methylphenol	-	-	-	-	-	-	-	-	<0.202	0.26	<1.006	<0.989	<0.997	<1.004	1.1	2.2	<0.201	0.088	<1.002	<0.992	<1.003	<0.998	<1.006	<1
3-Nitroaniline	-	-	-	-	-	-	-	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5

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Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-9 (13-14')	SWMU 14-9 (4-6')	SWMU 14-10 (0-0.5')	SWMU 14-10 (1.5-2.0')	SWMU 14-11 (0-0.5')	SWMU 14-11 (1.5-2.0')	SWMU 14-12 (0-0.5')	SWMU 14-12 (1.5-2.0')	SWMU 14-13 (0-0.5')	SWMU 14-13 (1.5-2.0')	SWMU 14-14 (0-0.5')	SWMU 14-14 (1.5-2.0')	SWMU 14-15 (0-0.5')	SWMU 14-15 (1.5-2.0')	SWMU 14-16 (0-0.5')	SWMU 14-16 (1.5-2.0')
									1207922-005	1207922-004	1207940-001	1207940-002	1207940-012	1207940-013	1207940-006	1207940-007	1207940-008	1207940-009	1207940-010	1207940-011	1207940-025	1207940-026	1207940-023	1207940-024
									7/18/2012	7/18/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
4-Chloroaniline	2.40E+01	(3)	8.60E+00	(6)	5.99E-02	(8)	5.99E-02	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
4-Nitroaniline	2.40E+02	(3)	8.60E+01	(6)	6.45E-01	(8)	6.45E-01	-	<0.403	<0.803	<2.011	<1.978	<1.995	<2.009	<0.801	<0.805	<0.401	<0.398	<2.004	<1.983	<2.005	<1.996	<2.012	<2
4-Nitrophenol	-	-	-	-	-	-	-	-	<0.252	0.22	<1.257	<1.236	<1.247	<1.255	<0.501	<0.503	<0.251	<0.249	<1.253	<1.24	<1.253	<1.248	<1.258	<1.25
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(8)	3.44E+03	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Acenaphthylene	-	-	-	-	-	-	-	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Aniline	8.50E+02	(3)	3.00E+02	(6)	1.80E+00	(8)	1.80E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(8)	1.72E+04	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Azobenzene	5.10E+01	(3)	2.30E+01	(6)	3.69E-01	(8)	3.69E-01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(8)	1.48E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	0.61	<1.006	<1
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(8)	1.48E-01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(8)	1.48E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(8)	1.48E+01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	<0.504	<1.004	<2.514	<2.473	0.47	0.66	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(8)	1.21E-02	-	<0.202	0.18	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	0.43	<1.006	<1
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(8)	1.07E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(8)	3.47E+02	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	1.1	<2.515	<2.5
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+02	(6)	9.22E+01	(8)	9.22E+01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Carbazole	-	-	-	-	-	-	-	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(8)	1.48E+02	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	0.16	<0.199	<1.002	<0.992	<1.003	0.65	<1.006	<1
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(8)	1.48E-01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(8)	4.45E+03	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(8)	3.71E+04	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(8)	3.21E+03	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	<0.252	<0.502	<1.257	<1.236	<1.247	<1.255	<0.501	<0.503	<0.251	<0.249	<1.253	<1.24	<1.253	<1.248	<1.258	<1.25
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(8)	2.29E+03	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(8)	2.29E+03	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	0.86	<1.006	<1
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(8)	1.83E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(8)	2.43E+02	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(8)	3.77E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(8)	1.48E+00	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(8)	8.84E+01	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	<0.202	1.8	<1.006	<0.989	<0.997	<1.004	6.6	1.6	<0.201	0.65	3.7	4.3	<1.003	1.7	<1.006	1.4
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(8)	2.88E-01	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E-01	(6)	3.23E-03	(8)	3.23E-03	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(8)	2.61E+02	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	<0.401	<0.402	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(8)	5.90E+00	-	<0.403	<0.803	<2.011	<1.978	<1.995	<2.009	<0.801	<0.805	<0.401	<0.398	<2.004	<1.983	<2.005	<1.996	<2.012	<2
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(8)	1.83E+03	-	<0.202	1.1	<1.006	<0.989	<0.997	<1.004	7.3	1.2	1.4	0.6	6.6	6.2	<1.003	2.8	<1.006	1.7
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(8)	2.29E+03	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	2.1	2.8	<0.201	<0.199	<1.002	<0.992	<1.003	<0.998	<1.006	<1
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(8)	1.72E+03	-	<0.202	<0.401	<1.006	<0.989	<0.997	<1.004	1.1	<0.402	0.21	0.11	1	0.68	<1.003	0.9	<1.006	<1
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	<0.504	<1.004	<2.514	<2.473	<2.493	<2.511	<1.001	<1.006	<0.502	<0.498	<2.505	<2.479	<2.507	<2.495	<2.515	<2.5
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	<10	**1800**	350	240	350	350	**15000**	**1500**	1000	**1300**	**7700**	**2800**	**1400**	**10000**	480	**4800**
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	1.1	59	3.7	7.5	5.8	27	700	370	43	58	450	60	27	1600	14	<250
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	<50	<490	190	150	150	80	790	<486	<495	<495	<977	<496	<994	<5066	480	**1100**

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-9 (13-14')	SWMU 14-9 (4-6')	SWMU 14-10 (0-0.5')	SWMU 14-10 (1.5-2.0')	SWMU 14-11 (0-0.5')	SWMU 14-11 (1.5-2.0')	SWMU 14-12 (0-0.5')	SWMU 14-12 (1.5-2.0')	SWMU 14-13 (0-0.5')	SWMU 14-13 (1.5-2.0')	SWMU 14-14 (0-0.5')	SWMU 14-14 (1.5-2.0')	SWMU 14-15 (0-0.5')	SWMU 14-15 (1.5-2.0')	SWMU 14-16 (0-0.5')	SWMU 14-16 (1.5-2.0')
									1207922-005	1207922-004	1207940-001	1207940-002	1207940-012	1207940-013	1207940-006	1207940-007	1207940-008	1207940-009	1207940-010	1207940-011	1207940-025	1207940-026	1207940-023	1207940-024
									7/18/2012	7/18/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012

EPA - Regional Screening Levels (November 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (Nov. 2012)

(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461

(8) SoilGW Risk-based EPA DAF = 461

(9) SoilGW MCL-based EPA DAF = 461

(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level

yellow highlight represents value above Leachate (DAF) Screening Level

Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-17 (0-0.5')	SWMU 14-17 (1.5-2.0')	SWMU 14-18 (0-0.5')	SWMU 14-18 (1.5-2.0')	SWMU 14-19 (0-0.5')	SWMU 14-19 (1.5-2.0')	SWMU 14-20 (0-0.5')	SWMU 14-21 (0-0.5')	SWMU 14-21 (1.5-2')	SWMU 14-21 (8-10')	SWMU 14-22 (0-0.5')	SWMU 14-22 (1.5-2')	SWMU 14-22 (4-6')	SWMU 14-22 (8-10')	SWMU 14-23 (0-0.5')	SWMU 14-23 (1.5-2')
									1207940-021	1207940-022	1207940-014	1207940-015	1207940-019	1207940-020	1207940-027	1210582-005	1210582-006	1210582-007	1210583-001	1210583-002	1210583-003	1210583-005	1210656-001	1210656-002
									7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/10/2012	10/10/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(8)	3.13E+01	-	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<5	<5	<5	<5	<5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(8)	3.90E+00	-	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	1.6J	<1.3	<1.3	2.2J	3.0J
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(8)	4.35E+03	-	850	600	620	680	180	790	940	470	750	160	630	430	170	250	600	460
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(8)	1.44E+02	-	0.86	0.87	0.86	0.76	0.38	0.81	0.69	<0.75	<0.75	0.91	0.9	0.83	0.89	0.8	0.61	0.62
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(8)	7.03E+01	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(8)	1.17E+05	-	20	25	25	26	6.6	12	9.4	5.7	7.4	8	12	10	7.6	9.3	9.6	15
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(8)	2.97E+00	-	20	25	25	26	6.6	12	9.4	5.7	7.4	8	12	10	7.6	9.3	9.6	15
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	5.4	5.4	5.2	5.5	3.2	4.8	5.2	3.2	3.9	4.3	5.5	4.2	4.3	3.8	3.4	3.7
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(8)	4.69E+01	-	1.33	<0.5	1.22	1.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.36	5.5
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(8)	5.48E+04	-	17000	15000	16000	15000	8200	12000	13000	11000	12000	12000	15000	14000	13000	13000	13000	12000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	7.1	3.2	10	14	2.2	4.1	2.7	10	5	4.7	5.9	4.3	4	3.9	4.2	7.6
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(8)	4.40E+02	-	560	640	580	540	300	640	650	550	550	220	550	540	370	270	720	570
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(8)	1.36E+01	-	1.3	0.12	0.2	0.15	0.011	0.063	0.0064	<0.033	<0.033	<0.033	0.083	0.05	<0.033	<0.033	0.1	<0.033
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(8)	1.56E+03	-	12	8.7	8.5	8.9	6.9	8	6.9	4.3	6.1	7.3	8.3	7.2	7.2	7.4	5.9	6.5
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(8)	3.91E+02	-	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<5	<5	<5	<5	<5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(8)	3.91E+02	-	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.2499	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(8)	3.91E+02	-	28	27	30	26	22	21	21	17	16	14	25	17	13	13	18	16
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(8)	2.35E+04	-	230	37	68	65	18	34	17	29	22	13	33	20	13	14	140	41
Volatile Organic Compounds - (EPA Method 8260) mg/kg																								
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(8)	7.59E-01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(8)	1.34E+03	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(8)	9.82E-02	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(8)	5.14E-02	-	<0.001	1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(8)	2.75E+00	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(8)	5.36E+01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,1-Dichloropropene	-	-	-	-	-	-	-	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(8)	1.15E-03	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	<0.001	33	<0.001	37	<0.05	<0.05	<0.001	0.00163	<0.001	<0.0009	0.00263	<0.0009	<0.001	<0.0011	0.00512	0.000894
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(8)	5.07E-04	-	<0.002	<2	<0.002	<5	<0.1	<0.1	<0.002	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(8)	7.10E-03	-	<0.001	**0.9**	<0.001	**1.2**	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(8)	1.64E-01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(8)	4.94E-01	-	<0.002	0.33	<0.002	0.82	<0.05	<0.05	<0.002	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	<0.001	7.8	<0.001	13	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	0.000983	<0.0009	<0.001	<0.0011	0.00205	<0.0007
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	<0.004	38	<0.004	12	0.02	0.022	<0.005	<0.0032	<0.0041	<0.0037	<0.0038	<0.0036	<0.004	<0.0045	<0.0043	<0.0029
2,2-Dichloropropane	-	-	-	-	-	-	-	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(8)	5.87E+02	-	0.00152	<10	<0.005	<25	<0.5	0.055	<0.006	0.0217	<0.0104	<0.0093	0.0165	<0.0089	<0.01	<0.0112	0.0188	<0.0073
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(8)	2.57E+02	-	<0.001	0.22	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(8)	9.38E+02	-	<0.005	<10	<0.005	<25	<0.5	<0.5	<0.006	<0.0081	<0.0104	<0.0093	<0.0095	<0.0089	<0.01	<0.0112	<0.0108	<0.0073
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	<0.004	60	<0.004	20	0.024	0.027	<0.005	<0.0032	<0.0041	<0.0037	<0.0038	<0.0036	<0.004	<0.0045	<0.0043	<0.0029
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
4-Isopropyltoluene	-	-	-	-	-	-	-	-	<0.001	2.7	<0.001	1.9	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	<0.005	<10	<0.005	<25	<0.5	<0.5	<0.006	<0.0081	<0.0104	<0.0093	<0.0095	<0.0089	<0.01	<0.0112	0.0142	<0.0073
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(8)	1.78E+03	-	0.00602	12	<0.033	34	0.14	<0.75	<0.034	0.627	0.0315	<0.0093	0.48	0.0505	0.0151	<0.0112	0.101	0.0383
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(8)	7.96E-01	-	0.00129	1.6	<0.001	2.2	<0.05	<0.05	<0.001	0.00192	0.00145	<0.0009	0.00124	0.000971	0.0019	0.00171	0.00261	0.00151
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(8)	1.25E-01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(8)	2.78E+02	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-17 (0-0.5')	SWMU 14-17 (1.5-2.0')	SWMU 14-18 (0-0.5')	SWMU 14-18 (1.5-2.0')	SWMU 14-19 (0-0.5')	SWMU 14-19 (1.5-2.0')	SWMU 14-20 (0-0.5')	SWMU 14-21 (0-0.5')	SWMU 14-21 (1.5-2')	SWMU 14-21 (8-10')	SWMU 14-22 (0-0.5')	SWMU 14-22 (1.5-2')	SWMU 14-22 (4-6')	SWMU 14-22 (8-10')	SWMU 14-23 (0-0.5')	SWMU 14-23 (1.5-2')
									1207940-021	1207940-022	1207940-014	1207940-015	1207940-019	1207940-020	1207940-027	1210582-005	1210582-006	1210582-007	1210583-001	1210583-002	1210583-003	1210583-005	1210656-001	1210656-002
									7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/10/2012	10/10/2012
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(8)	8.86E-01	-	-	<3	-	<7.5	<0.15	<0.15	-	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(8)	1.30E+02	-	<0.005	<10	<0.005	<25	<0.5	<0.5	<0.006	<0.0081	<0.0104	<0.0093	<0.0095	<0.0089	<0.01	<0.0112	<0.0108	<0.0073
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(8)	7.39E-01	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(8)	2.27E+01	-	<0.001	0.11	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(8)	2.48E+03	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(8)	2.12E-01	-	<0.001	<1	<0.001	<2.5	<0.05	0.0069	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(8)	2.03E+01	-	0.000352	<3	<0.001	<7.5	<0.15	<0.15	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(8)	8.47E+00	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(8)	5.71E-01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(8)	1.52E-01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(8)	7.89E-01	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(8)	1.49E+02	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(8)	5.98E+00	-	<0.001	13	<0.001	17	<0.05	<0.05	<0.001	0.00194	<0.001	<0.0009	0.00152	<0.0009	<0.001	<0.0011	0.00207	<0.0007
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<0.001	<2	<0.001	<5	<0.1	<0.1	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(8)	3.99E+02	-	<0.001	2.9	<0.001	3.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(8)	1.11E+01	-	<0.002	0.16	<0.002	<2.5	<0.05	<0.05	<0.002	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(8)	1.90E+01	-	<0.005	0.14	<0.005	0.31	0.048	0.016	<0.006	<0.0024	0.0142	0.00978	0.00694	<0.0027	<0.003	<0.0034	<0.0032	<0.0022
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	<0.001	17	0.000458	8.8	<0.1	<0.1	<0.001	<0.0016	<0.0021	<0.0019	<0.0019	<0.0018	<0.002	<0.0022	<0.0022	<0.0015
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	<0.001	4.6	<0.001	2.8	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	<0.001	4.9	<0.001	5.7	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
sec-Butylbenzene	-	-	-	-	-	-	-	-	<0.001	2.9	<0.001	2	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(8)	6.40E+02	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
tert-Butylbenzene	-	-	-	-	-	-	-	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(8)	1.98E-01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(8)	5.84E+02	-	0.00273	0.17	0.00075	<2.5	<0.05	<0.05	<0.001	0.003	0.00126	<0.0009	0.00318	0.00135	0.00162	<0.0011	0.0075	0.00235
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(8)	1.24E+01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(8)	4.85E-01	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(8)	4.10E+02	-	0.000414	<1	<0.001	<2.5	<0.05	<0.05	0.000525	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(8)	2.50E-02	-	<0.001	<1	<0.001	<2.5	<0.05	<0.05	<0.001	<0.0008	<0.001	<0.0009	<0.0009	<0.0009	<0.001	<0.0011	<0.0011	<0.0007
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(8)	7.21E+01	-	<0.003	14	<0.003	53	<0.1	<0.1	<0.003	0.0128	<0.0021	<0.0019	0.00894	<0.0018	<0.002	<0.0022	0.0103	<0.0015
Semi Volatile Organics - (EPA Method 8270) mg/kg																								
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	<1.979	29	<0.995	4.5	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(8)	4.78E+03	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(8)	4.78E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(8)	4.60E+01	-	<3.958	<2.007	<1.989	<3.991	<2.007	<3.954	<0.8	<0.3992	<0.3991	<0.3966	<0.3989	<0.3955	<0.4036	<0.3979	<0.7997	<1.973
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(8)	3.07E+02	-	<2.968	<1.506	<1.492	<2.993	<1.506	<2.965	<0.6	<0.2994	<0.2993	<0.2974	<0.2992	<0.2966	<0.3027	<0.2984	<0.5998	<1.4798
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(8)	2.91E+01	-	<3.958	0.53	0.46	<3.991	<2.007	<3.954	<0.8	<0.3992	<0.3991	<0.3966	<0.3989	<0.3955	<0.4036	<0.3979	<0.7997	<1.973
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(8)	1.04E+00	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(8)	1.77E+01	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(8)	4.01E-01	-	<2.474	<1.255	<1.243	<2.494	<1.255	<2.471	<0.5	<0.2495	<0.2494	<0.2479	<0.2493	<0.2472	<0.2523	<0.2487	<0.4998	<1.2331
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(8)	5.33E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	<1.979	38	<0.995	7	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
2-Nitrophenol	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(8)	3.41E+00	-	<2.474	<1.255	<1.243	<2.494	<1.255	<2.471	<0.5	<0.2495	<0.2494	<0.2479	<0.2493	<0.2472	<0.2523	<0.2487	<0.4998	<1.2331
3+4-Methylphenol	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
3-Nitroaniline	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-17 (0-0.5')	SWMU 14-17 (1.5-2.0')	SWMU 14-18 (0-0.5')	SWMU 14-18 (1.5-2.0')	SWMU 14-19 (0-0.5')	SWMU 14-19 (1.5-2.0')	SWMU 14-20 (0-0.5')	SWMU 14-21 (0-0.5')	SWMU 14-21 (1.5-2')	SWMU 14-21 (8-10')	SWMU 14-22 (0-0.5')	SWMU 14-22 (1.5-2')	SWMU 14-22 (4-6')	SWMU 14-22 (8-10')	SWMU 14-23 (0-0.5')	SWMU 14-23 (1.5-2')
									1207940-021	1207940-022	1207940-014	1207940-015	1207940-019	1207940-020	1207940-027	1210582-005	1210582-006	1210582-007	1210583-001	1210583-002	1210583-003	1210583-005	1210656-001	1210656-002
									7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/10/2012	10/10/2012
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
4-Chloroaniline	2.40E+01	(3)	8.60E+00	(6)	5.99E-02	(8)	5.99E-02	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
4-Nitroaniline	2.40E+02	(3)	8.60E+01	(6)	6.45E-01	(8)	6.45E-01	-	<3.958	<2.007	<1.989	<3.991	<2.007	<3.954	<0.8	<0.3992	<0.3991	<0.3966	<0.3989	<0.3955	<0.4036	<0.3979	<0.7997	<1.973
4-Nitrophenol	-	-	-	-	-	-	-	-	<2.474	<1.255	<1.243	<2.494	<1.255	<2.471	<0.5	<0.2495	<0.2494	<0.2479	<0.2493	<0.2472	<0.2523	<0.2487	<0.4998	<1.2331
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(8)	3.44E+03	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Acenaphthylene	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Aniline	8.50E+02	(3)	3.00E+02	(6)	1.80E+00	(8)	1.80E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(8)	1.72E+04	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Azobenzene	5.10E+01	(3)	2.30E+01	(6)	3.69E-01	(8)	3.69E-01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(8)	1.48E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(8)	1.48E-01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(8)	1.48E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(8)	1.48E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	0.26	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(8)	1.21E-02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(8)	1.07E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(8)	3.47E+02	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+02	(6)	9.22E+01	(8)	9.22E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Carbazole	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(8)	1.48E+02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(8)	1.48E-01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(8)	4.45E+03	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(8)	3.71E+04	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(8)	3.21E+03	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	<2.474	<1.255	<1.243	<2.494	<1.255	<2.471	<0.5	<0.2495	<0.2494	<0.2479	<0.2493	<0.2472	<0.2523	<0.2487	<0.7997	<1.973
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(8)	2.29E+03	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(8)	2.29E+03	-	<1.979	3	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(8)	1.83E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(8)	2.43E+02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(8)	3.77E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(8)	1.48E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(8)	8.84E+01	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	<1.979	7.1	<0.995	2.8	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(8)	2.88E-01	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E-01	(6)	3.23E-03	(8)	3.23E-03	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(8)	2.61E+02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(8)	5.90E+00	-	<3.958	<2.007	<1.989	<3.991	<2.007	<3.954	<0.8	<0.3992	<0.3991	<0.3966	<0.3989	<0.3955	<0.4036	<0.3979	<0.7997	<1.973
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(8)	1.83E+03	-	<1.979	9.8	<0.995	2.2	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(8)	2.29E+03	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(8)	1.72E+03	-	<1.979	2.6	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	**2900**	**13000**	**1200**	**14000**	<10	29	<10	21	<10	<10	150	90	<10	<10	45	32
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	<25	230	24	570	1.2	<5	1.7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	**2800**	<2503	680	<2535	<49	51	<50	<50	<51	<50	96	60	<48	<48	<50	75

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-17 (0-0.5')	SWMU 14-17 (1.5-2.0')	SWMU 14-18 (0-0.5')	SWMU 14-18 (1.5-2.0')	SWMU 14-19 (0-0.5')	SWMU 14-19 (1.5-2.0')	SWMU 14-20 (0-0.5')	SWMU 14-21 (0-0.5')	SWMU 14-21 (1.5-2')	SWMU 14-21 (8-10')	SWMU 14-22 (0-0.5')	SWMU 14-22 (1.5-2')	SWMU 14-22 (4-6')	SWMU 14-22 (8-10')	SWMU 14-23 (0-0.5')	SWMU 14-23 (1.5-2')
									1207940-021	1207940-022	1207940-014	1207940-015	1207940-019	1207940-020	1207940-027	1210582-005	1210582-006	1210582-007	1210583-001	1210583-002	1210583-003	1210583-005	1210656-001	1210656-002
									7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	7/19/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/9/2012	10/10/2012	10/10/2012

EPA - Regional Screening Levels (November 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (Nov. 2012)

(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461

(8) SoilGW Risk-based EPA DAF = 461

(9) SoilGW MCL-based EPA DAF = 461

(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level

yellow highlight represents value above Leachate (DAF) Screening Level

Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-23 (12-14')	SWMU 14-23 (14-16')	SWMU 14-24 (0-0.5')	SWMU 14-24 (1.5-2')
									1210656-003	1210656-004	1210860-001	1210860-002
									10/10/2012	10/10/2012	10/17/2012	10/17/2012
Metals (mg/kg)												
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(8)	3.13E+01	-	<5	<5	<5	<5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(8)	3.90E+00	-	1.6J	1.3J	2.1J	1.7J
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(8)	4.35E+03	-	220	130	440	43
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(8)	1.44E+02	-	0.87	0.75	0.8	0.83
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(8)	7.03E+01	-	<0.2	<0.2	<0.2	<0.2
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(8)	1.17E+05	-	8.3	7.8	10	7.8
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(8)	2.97E+00	-	8.3	7.8	10	7.8
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	4	4	4.6	3.5
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(8)	4.69E+01	-	<0.3	<0.3	<0.263	<0.311
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(8)	5.48E+04	-	13000	12000	15000	16000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	3.7	3.5	2.5	3.3
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(8)	4.40E+02	-	300	570	450	230
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(8)	1.36E+01	-	<0.033	<0.033	<0.033	<0.033
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(8)	1.56E+03	-	7.2	6.8	8	6.4
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(8)	3.91E+02	-	<5	<5	<5	<5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(8)	3.91E+02	-	<0.5	<0.5	<0.5	<0.5
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(8)	3.91E+02	-	14	15	22	14
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(8)	2.35E+04	-	13	12	25	12
Volatile Organic Compounds - (EPA Method 8260) mg/kg												
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(8)	7.59E-01	-	<0.5	<0.05	<0.0008	<0.0008
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(8)	1.34E+03	-	<0.5	<0.05	<0.0008	<0.0008
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(8)	9.82E-02	-	<0.5	<0.05	<0.0008	<0.0008
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(8)	5.14E-02	-	<0.5	<0.05	<0.0008	<0.0008
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(8)	2.75E+00	-	<1	<0.1	<0.0008	<0.0008
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(8)	5.36E+01	-	<0.5	<0.05	<0.0008	<0.0008
1,1-Dichloropropene	-	-	-	-	-	-	-	-	<1	<0.1	<0.0008	<0.0008
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	<1	<0.1	<0.0008	<0.0008
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(8)	1.15E-03	-	<1	<0.1	<0.0008	<0.0008
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.5	<0.05	<0.0008	<0.0008
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	<0.5	<0.05	0.000935	<0.0008
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(8)	5.07E-04	-	<1	<0.1	<0.0008	<0.0008
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(8)	7.10E-03	-	<0.5	<0.05	<0.0008	<0.0008
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.5	<0.05	<0.0008	<0.0008
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(8)	1.64E-01	-	<0.5	<0.05	<0.0008	<0.0008
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(8)	4.94E-01	-	<0.5	<0.05	<0.0008	<0.0008
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	<0.5	<0.05	<0.0008	<0.0008
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.5	<0.05	<0.0008	<0.0008
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	<0.5	<0.05	<0.0008	<0.0008
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.5	<0.05	<0.0008	<0.0008
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	2.3	<0.2	<0.0032	<0.0031
2,2-Dichloropropane	-	-	-	-	-	-	-	-	<1	<0.1	<0.0008	<0.0008
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(8)	5.87E+02	-	<5	<0.5	0.00846	<0.0078
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(8)	2.57E+02	-	<0.5	<0.05	<0.0008	<0.0008
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(8)	9.38E+02	-	<5	<0.5	<0.008	<0.0078
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	3.5	<0.2	<0.0032	<0.0031
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	<0.5	<0.05	<0.0008	<0.0008
4-Isopropyltoluene	-	-	-	-	-	-	-	-	<0.5	<0.05	<0.0008	<0.0008
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	<5	<0.5	<0.008	<0.0078
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(8)	1.78E+03	-	<7.5	<0.75	0.048	0.0202
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(8)	7.96E-01	-	1.1	<0.05	0.00213	0.00129
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	<0.5	<0.05	<0.0008	<0.0008
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(8)	1.25E-01	-	<0.5	<0.05	<0.0008	<0.0008
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(8)	2.78E+02	-	<0.5	<0.05	<0.0008	<0.0008

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-23 (12-14')	SWMU 14-23 (14-16')	SWMU 14-24 (0-0.5')	SWMU 14-24 (1.5-2')
									1210656-003	1210656-004	1210860-001	1210860-002
									10/10/2012	10/10/2012	10/17/2012	10/17/2012
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(8)	8.86E-01	-	<1.5	<0.15	<0.0008	<0.0008
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(8)	1.30E+02	-	<5	<0.5	<0.008	<0.0078
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(8)	7.39E-01	-	<1	<0.1	<0.0008	<0.0008
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(8)	2.27E+01	-	<0.5	<0.05	<0.0008	<0.0008
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(8)	2.48E+03	-	<1	<0.1	<0.0008	<0.0008
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(8)	2.12E-01	-	<0.5	<0.05	<0.0008	<0.0008
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(8)	2.03E+01	-	<1.5	<0.15	<0.0008	<0.0008
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(8)	8.47E+00	-	<0.5	<0.05	<0.0008	<0.0008
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(8)	5.71E-01	-	<0.5	<0.05	<0.0008	<0.0008
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(8)	1.52E-01	-	<0.5	<0.05	<0.0008	<0.0008
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(8)	7.89E-01	-	<1	<0.1	<0.0008	<0.0008
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(8)	1.49E+02	-	<0.5	<0.05	<0.0008	<0.0008
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(8)	5.98E+00	-	3.8	<0.05	<0.0008	<0.0008
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<1	<0.1	<0.0008	<0.0008
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(8)	3.99E+02	-	0.74	<0.05	<0.0008	<0.0008
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(8)	1.11E+01	-	<0.5	<0.05	<0.0008	<0.0008
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(8)	1.90E+01	-	<1.5	<0.15	<0.0024	<0.0023
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	1.3	<0.1	<0.0016	<0.0016
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	<1.5	<0.15	<0.0008	<0.0008
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	1.3	<0.05	<0.0008	<0.0008
sec-Butylbenzene	-	-	-	-	-	-	-	-	0.51	<0.05	<0.0008	<0.0008
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(8)	6.40E+02	-	<0.5	<0.05	<0.0008	<0.0008
tert-Butylbenzene	-	-	-	-	-	-	-	-	<0.5	<0.05	<0.0008	<0.0008
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(8)	1.98E-01	-	<0.5	<0.05	<0.0008	<0.0008
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(8)	5.84E+02	-	<0.5	<0.05	0.00222	0.000908
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(8)	1.24E+01	-	<0.5	<0.05	<0.0008	<0.0008
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	<0.5	<0.05	<0.0008	<0.0008
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(8)	4.85E-01	-	<0.5	<0.05	<0.0008	<0.0008
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(8)	4.10E+02	-	<0.5	<0.05	<0.0008	<0.0008
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(8)	2.50E-02	-	<0.5	<0.05	<0.0008	<0.0008
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(8)	7.21E+01	-	<1	<0.1	0.0038	<0.0016
Semi Volatile Organics - (EPA Method 8270) mg/kg												
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.1982	<0.2017	<0.1997	<0.1997
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(8)	4.78E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(8)	4.78E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(8)	4.60E+01	-	<0.3963	<0.4034	<0.3995	<0.3993
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(8)	3.07E+02	-	<0.2972	<0.3025	<0.2996	<0.2995
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(8)	2.91E+01	-	<0.3963	<0.4034	<0.3995	<0.3993
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(8)	1.04E+00	-	<0.4954	<0.5042	<0.4993	<0.4992
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(8)	1.77E+01	-	<0.4954	<0.5042	<0.4993	<0.4992
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(8)	4.01E-01	-	<0.2477	<0.2521	<0.2497	<0.2496
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(8)	5.33E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	<0.4954	<0.5042	<0.4993	<0.4992
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
2-Nitrophenol	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
3,3´-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(8)	3.41E+00	-	<0.2477	<0.2521	<0.2497	<0.2496
3+4-Methylphenol	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
3-Nitroaniline	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	<0.4954	<0.5042	<0.4993	<0.4992

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Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-23 (12-14')	SWMU 14-23 (14-16')	SWMU 14-24 (0-0.5')	SWMU 14-24 (1.5-2')
									1210656-003	1210656-004	1210860-001	1210860-002
									10/10/2012	10/10/2012	10/17/2012	10/17/2012
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	<0.4954	<0.5042	<0.4993	<0.4992
4-Chloroaniline	2.40E+01	(3)	8.60E+00	(6)	5.99E-02	(8)	5.99E-02	-	<0.4954	<0.5042	<0.4993	<0.4992
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
4-Nitroaniline	2.40E+02	(3)	8.60E+01	(6)	6.45E-01	(8)	6.45E-01	-	<0.3963	<0.4034	<0.3995	<0.3993
4-Nitrophenol	-	-	-	-	-	-	-	-	<0.2477	<0.2521	<0.2497	<0.2496
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(8)	3.44E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Acenaphthylene	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
Aniline	8.50E+02	(3)	3.00E+02	(6)	1.80E+00	(8)	1.80E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(8)	1.72E+04	-	<0.1982	<0.2017	<0.1997	<0.1997
Azobenzene	5.10E+01	(3)	2.30E+01	(6)	3.69E-01	(8)	3.69E-01	-	<0.1982	<0.2017	<0.1997	<0.1997
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(8)	1.48E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(8)	1.48E-01	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(8)	1.48E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(8)	1.48E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	<0.4954	<0.5042	<0.4993	<0.4992
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	<0.1982	<0.2017	0.32	<0.1997
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(8)	1.21E-02	-	<0.1982	<0.2017	<0.1997	<0.1997
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(8)	1.07E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(8)	3.47E+02	-	<0.4954	<0.5042	<0.4993	<0.4992
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+02	(6)	9.22E+01	(8)	9.22E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
Carbazole	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(8)	1.48E+02	-	<0.1982	<0.2017	<0.1997	<0.1997
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(8)	1.48E-01	-	<0.1982	<0.2017	<0.1997	<0.1997
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(8)	4.45E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(8)	3.71E+04	-	<0.1982	<0.2017	<0.1997	<0.1997
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(8)	3.21E+03	-	<0.4954	<0.5042	<0.4993	<0.4992
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	<0.3963	<0.4034	<0.3995	<0.3993
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(8)	2.29E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(8)	2.29E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(8)	1.83E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(8)	2.43E+02	-	<0.1982	<0.2017	<0.1997	<0.1997
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(8)	3.77E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(8)	1.48E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(8)	8.84E+01	-	<0.4954	<0.5042	<0.4993	<0.4992
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(8)	2.88E-01	-	<0.4954	<0.5042	<0.4993	<0.4992
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E-01	(6)	3.23E-03	(8)	3.23E-03	-	<0.1982	<0.2017	<0.1997	<0.1997
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(8)	2.61E+02	-	<0.1982	<0.2017	<0.1997	<0.1997
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(8)	5.90E+00	-	<0.3963	<0.4034	<0.3995	<0.3993
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(8)	1.83E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(8)	2.29E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(8)	1.72E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	<0.4954	<0.5042	<0.4993	<0.4992
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg												
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	140	19	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	160	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	<49	<49	<50	<48

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-23 (12-14')	SWMU 14-23 (14-16')	SWMU 14-24 (0-0.5')	SWMU 14-24 (1.5-2')
									1210656-003	1210656-004	1210860-001	1210860-002
									10/10/2012	10/10/2012	10/17/2012	10/17/2012

EPA - Regional Screening Levels (November 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (Nov. 2012)

(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461

(8) SoilGW Risk-based EPA DAF = 461

(9) SoilGW MCL-based EPA DAF = 461

(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "uknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level

yellow highlight represents value above Leachate (DAF) Screening Level

Bold with yellow - value exceeds Residential Screening Level and DAF

Table 9
Aeration Basin Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	SWMU 1-2 GW	SWMU 1-3 GW	SWMU 1-4 GW	SWMU 1-5 GW	SWMU 1-6 GW	SWMU 1-7 GW	SWMU 1-8 GW	SWMU 1-24 GW	SWMU 1-37 GW
			1210279-006	1210332-005	1210372-012 / 026	1210372-013	1210372-027	1210372-028	1210372-014	1210660-001	1210692-026
Sample Date			10/2/2012	10/3/2012	10/4 & 10/5/2012	10/5/2012	10/4/2012	10/4/2012	10/5/2012	10/10/2012	10/11/2012
Metals (mg/l)											
Antimony	6.00E-03	(2)	<0.0125	<0.0025	<0.0025	-	<0.005	<0.005	<0.005	<0.005	<0.0025
Arsenic	1.00E-02	(2)	**0.063**	**0.015**	**0.016**	-	**0.054**	**0.046**	**0.032**	**0.052**	0.0082
Barium	1.00E+00	(3)	**56**	0.54	**1.2**	-	**3.4**	**3.2**	**4.7**	**17**	0.24
Beryllium	4.00E-03	(2)	**0.21**	**0.0066**	<0.002	-	**0.041**	**0.051**	**0.0065**	**0.032**	<0.002
Cadmium	1.00E-02	(3)	<0.05	<0.002	<0.002	-	<0.02	<0.02	<0.004	<0.004	<0.002
Chromium III	5.00E-02	(3)	**0.31**	0.015	<0.006	-	**0.16**	**0.17**	**0.058**	**0.14**	<0.006
Cobalt	5.00E-02	(3)	**0.53**	0.043	0.011	-	**0.27**	**0.16**	**0.053**	**0.11**	0.026
Cyanide, Total	2.00E-01	(3)	0.037	0.032	0.021	-	0.028	0.052	0.018	0.059	0.031
Iron, Total	1.00E+00	(3)	**140**	**20**	0.32	-	**94**	**130**	**39**	**160**	**2.5**
Lead	1.50E-02	(2)	**1.7**	**0.057**	<0.0025	-	**0.29**	**0.34**	**0.078**	**0.49**	0.0041
Manganese	2.00E-01	(3)	**95**	**2.1**	**0.99**	-	**39**	**33**	**7.9**	**43**	**1.1**
Mercury	2.00E-03	(3)	0.00027	<0.0002	<0.0002	-	0.00021	0.00034	<0.0002	0.00022	<0.0002
Nickel	2.00E-01	(3)	**0.95**	**0.35**	0.13	-	**0.55**	**0.46**	0.11	**0.21**	**0.26**
Selenium	5.00E-02	(3)	**0.059**	0.0097	0.0073	-	0.024	0.022	0.0075	0.023	0.0072
Silver	5.00E-02	(3)	<0.125	<0.005	<0.005	-	<0.05	<0.05	<0.01	<0.01	<0.005
Vanadium	1.83E-01	(4)	<1.25	<0.05	<0.05	-	<0.5	<0.5	<0.1	**0.2**	<0.05
Zinc	1.00E+01	(3)	1.1	0.068	0.047	-	0.88	0.42	0.11	0.27	0.023
Chloride	-		1600	1600	1900	-	1200	1800	660	1500	1100
Fluoride	1.60E+00	(3)	**3**	0.89	**4.8**	-	**8.8**	1.1	0.78	**13**	1.4
Sulfate	-		550	810	180	-	1800	2200	52	110	500
Volatile Organic Compounds - (EPA Method 8260B) (mg/l)											
1,1,1,2-Tetrachloroethane	5.24E-03	(4)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1,1-Trichloroethane	6.00E-02	(3)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1,2,2-Tetrachloroethane	2.00E-02	(3)	<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002
1,1,2-Trichloroethane	5.00E-03	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1-Dichloroethane	2.50E-02	(3)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1-Dichloroethene	5.00E-03	(3)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1-Dichloropropene	-		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2,3-Trichlorobenzene	5.20E-02	(1)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2,3-Trichloropropane	7.18E-06	(4)	<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002
1,2,4-Trichlorobenzene	7.00E-02	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2,4-Trimethylbenzene	1.50E-02	(1)	0.01	<0.001	**0.032**	<0.002	<0.001	<0.002	0.0069	0.015	<0.001
1,2-Dibromo-3-chloropropane	2.00E-04	(2)	<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002
1,2-Dibromoethane (EDB)	5.00E-05	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2-Dichlorobenzene	6.00E-01	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2-Dichloroethane (EDC)	5.00E-03	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2-Dichloropropane	5.00E-03	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,3,5-Trimethylbenzene	8.70E-02	(1)	<0.002	<0.001	0.008	<0.002	<0.001	<0.002	0.0015	<0.005	<0.001
1,3-Dichlorobenzene	-		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,3-Dichloropropane	2.90E-01	(1)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,4-Dichlorobenzene	7.50E-02	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1-Methylnaphthalene	9.70E-03	(5)	<0.008	<0.004	**0.011**	<0.008	<0.004	<0.008	**0.0098**	<0.02	<0.004
2,2-Dichloropropane	-		<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002
2-Butanone	7.06E+00	(4)	<0.02	<0.01	0.047	0.02	0.026	<0.02	<0.01	<0.05	<0.01
2-Chlorotoluene	7.30E-01	(4)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
2-Hexanone	8.76E-01	(4)	<0.02	<0.01	0.016	<0.02	<0.01	<0.02	<0.01	<0.05	<0.01
2-Methylnaphthalene	2.70E-02	(1)	<0.008	<0.004	0.019	<0.008	<0.004	<0.008	0.01	<0.02	<0.004
4-Chlorotoluene	1.90E-01	(1)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
4-Isopropyltoluene	-		<0.002	<0.001	0.0015	<0.002	0.0012	<0.002	<0.001	<0.005	0.012
4-Methyl-2-pentanone	1.00E+00	(1)	<0.02	<0.01	0.015	<0.02	<0.01	<0.02	<0.01	<0.05	<0.01
Acetone	2.18E+01	(4)	0.027	0.014	0.13	0.049	0.27	<0.02	0.058	0.052	0.039
Benzene	5.00E-03	(2)	**0.017**	0.0034	**0.024**	0.0045	<0.001	<0.002	0.0023	**0.02**	0.0011
Bromobenzene	5.40E-02	(1)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Bromodichloromethane	8.00E-02	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Bromoform	8.00E-02	(2)	<0.002	<0.001	<0.001	0.0027	<0.001	<0.002	<0.001	<0.005	<0.001
Bromomethane	8.66E-03	(4)	<0.006	<0.003	<0.003	<0.006	0.003	<0.006	<0.003	<0.015	<0.003
Carbon disulfide	1.04E+00	(4)	<0.02	<0.01	<0.01	<0.02	0.03	<0.02	<0.01	<0.05	<0.01
Carbon Tetrachloride	5.00E-03	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Chlorobenzene	1.00E-01	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Chloroethane	2.09E+01	(4)	<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002

Table 9
Aeration Basin Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	SWMU 1-2 GW	SWMU 1-3 GW	SWMU 1-4 GW	SWMU 1-5 GW	SWMU 1-6 GW	SWMU 1-7 GW	SWMU 1-8 GW	SWMU 1-24 GW	SWMU 1-37 GW
			1210279-006	1210332-005	1210372-012 / 026	1210372-013	1210372-027	1210372-028	1210372-014	1210660-001	1210692-026
Sample Date			10/2/2012	10/3/2012	10/4 & 10/5/2012	10/5/2012	10/4/2012	10/4/2012	10/5/2012	10/10/2012	10/11/2012
Chloroform	8.00E-02	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Chloromethane	1.88E-01	(4)	<0.006	<0.003	<0.003	<0.006	0.0035	<0.006	<0.003	<0.015	<0.003
cis-1,2-DCE	7.00E-02	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
cis-1,3-Dichloropropene	4.33E-03	(4)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Dibromochloromethane	8.00E-02	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Dibromomethane	8.16E-03	(4)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Dichlorodifluoromethane	2.03E-01	(4)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Ethylbenzene	7.00E-01	(2)	0.0047	<0.001	0.016	<0.002	<0.001	<0.002	0.0028	0.0089	<0.001
Hexachlorobutadiene	8.62E-03	(4)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Isopropylbenzene (Cumene)	6.79E-01	(4)	<0.002	<0.001	0.0015	<0.002	<0.001	<0.002	0.0013	<0.005	<0.001
Methyl tert-butyl ether (MTBE)	1.25E-01	(4)	0.043	0.04	0.059	<0.002	<0.001	0.014	**0.31**	0.065	**0.13**
Methylene Chloride	5.00E-03	(2)	<0.006	<0.003	<0.003	<0.006	<0.003	<0.006	<0.003	<0.015	<0.003
Naphthalene	1.43E-03	(4)	<0.004	<0.002	**0.032**	<0.004	<0.002	<0.004	**0.0023**	**0.022**	<0.002
n-Butylbenzene	7.80E-01	(1)	<0.006	<0.003	<0.003	<0.006	<0.003	<0.006	<0.003	<0.015	<0.003
n-Propylbenzene	5.30E-01	(1)	0.0027	<0.001	0.0027	<0.002	<0.001	<0.002	0.0017	<0.005	<0.001
sec-Butylbenzene	-		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	0.0014	<0.005	<0.001
Styrene	1.00E-01	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
tert-Butylbenzene	-		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Tetrachloroethene (PCE)	5.00E-03	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Toluene	7.50E-01	(3)	0.004	<0.001	0.016	0.0072	<0.001	<0.002	0.0023	0.018	<0.001
trans-1,2-DCE	1.00E-01	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
trans-1,3-Dichloropropene	-		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Trichloroethene (TCE)	5.00E-03	(2)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Trichlorofluoromethane	1.29E+00	(4)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Vinyl chloride	1.00E-03	(3)	<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Xylenes, Total	6.20E-01	(3)	0.02	<0.0015	0.1	<0.003	<0.0015	<0.003	0.0059	0.038	<0.0015
Semi Volatile Organics - (EPA Method 8270C) (mg/l)											
1,2,4-Trichlorobenzene	7.00E-02	(2)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	6.00E-01	(2)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
1,3-Dichlorobenzene	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
1,4-Dichlorobenzene	7.50E-02	(2)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
1-Methylnaphthalene	9.70E-03	(5)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	**0.01**	<0.01
2,4,5-Trichlorophenol	3.65E+00	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2,4,6-Trichlorophenol	3.65E-02	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2,4-Dichlorophenol	1.10E-01	(4)	<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
2,4-Dimethylphenol	7.30E-01	(4)	0.026	<0.01	**0.85**	<0.01	<0.02	<0.01	<0.01	0.23	<0.01
2,4-Dinitrophenol	7.30E-02	(4)	<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
2,4-Dinitrotoluene	2.17E-03	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2,6-Dinitrotoluene	3.65E-02	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Chloronaphthalene	1.21E-03	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Chlorophenol	1.83E-01	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Methylnaphthalene	2.70E-02	(1)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Methylphenol	7.20E-01	(1)	<0.01	<0.01	0.018	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Nitroaniline	1.50E+00	(1)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Nitrophenol	-		<0.01	<0.01	<0.01	<0.01	0.24	<0.01	<0.01	<0.01	<0.01
3,3´-Dichlorobenzidine	1.49E-03	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
3+4-Methylphenol	-		<0.01	<0.01	0.018	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
3-Nitroaniline	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4,6-Dinitro-2-methylphenol	1.20E-03	(1)	<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
4-Bromophenyl phenyl ether	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Chloro-3-methylphenol	1.10E+00	(1)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Chloroaniline	3.20E-03	(5)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Chlorophenyl phenyl ether	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Nitroaniline	3.30E-02	(5)	<0.01	<0.02	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Nitrophenol	-		<0.01	<0.01	<0.01	<0.01	0.026	<0.01	<0.01	<0.01	<0.01
Acenaphthene	2.19E+00	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Aniline	1.20E-01	(5)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Anthracene	1.10E+01	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Azobenzene	1.00E-03	(5)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benz(a)anthracene	2.95E-04	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01

Table 9
Aeration Basin Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	SWMU 1-2 GW	SWMU 1-3 GW	SWMU 1-4 GW	SWMU 1-5 GW	SWMU 1-6 GW	SWMU 1-7 GW	SWMU 1-8 GW	SWMU 1-24 GW	SWMU 1-37 GW
			1210279-006	1210332-005	1210372-012 / 026	1210372-013	1210372-027	1210372-028	1210372-014	1210660-001	1210692-026
Sample Date			10/2/2012	10/3/2012	10/4 & 10/5/2012	10/5/2012	10/4/2012	10/4/2012	10/5/2012	10/10/2012	10/11/2012
Benzo(a)pyrene	2.00E-04	(2)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	2.95E-04	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	2.95E-03	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzoic acid	5.80E+01	(1)	<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
Benzyl alcohol	1.50E+00	(1)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroethoxy)methane	4.60E-02	(1)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroethyl)ether	1.19E-04	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroisopropyl)ether	9.60E-03	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Bis(2-ethylhexyl)phthalate	6.00E-03	(2)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Butyl benzyl phthalate	1.40E-01	(5)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Carbazole	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Chrysene	2.95E-02	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Dibenz(a,h)anthracene	2.95E-05	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Dibenzofuran	5.80E-03	(1)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Diethyl phthalate	2.92E+01	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Dimethyl phthalate	3.65E+02	(4)	<0.01	<0.01	0.01	0.013	<0.02	<0.01	<0.01	<0.01	<0.01
Di-n-butyl phthalate	3.65E+00	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Di-n-octyl phthalate	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02
Fluoranthene	1.46E+00	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Fluorene	1.46E+00	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachlorobenzene	1.00E-03	(2)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachlorobutadiene	8.62E-03	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachlorocyclopentadiene	5.00E-02	(2)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachloroethane	1.68E-02	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	2.95E-04	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Isophorone	7.07E-01	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Naphthalene	1.43E-03	(4)	<0.01	<0.01	**0.016**	<0.01	<0.02	<0.01	<0.01	**0.011**	<0.01
Nitrobenzene	1.22E-03	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
N-Nitrosodi-n-propylamine	9.30E-05	(5)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
N-Nitrosodiphenylamine	1.37E-01	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Pentachlorophenol	1.00E-03	(2)	<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
Phenanthrene	1.10E+00	(3)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Phenol	1.10E+01	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Pyrene	1.10E+00	(4)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Pyridine	1.50E-02	(1)	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Total Petroluem Hydrocarbons (method 8015) (mg/l)											
Diesel Range Organics (DRO)	-		<2	<1	4.4	<1	1.3	<1	<1	1.9	1
Gasoline Range Organics (GRO)	-		0.71	0.65	0.73	0.26	0.13	0.22	1	1.9	0.56
Motor Oil Range Organics (MRO)	-		<10	<5	<5	<5	<5	<5	<5	<5	<5

- No screening level or analytical result available
450 - bolded value exceeds screening level
(1) EPA - Regional Screening Levels (November 2012) - Tap Water
(2) EPA - Regional Screening Levels (November 2012) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3103 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED Tap Water Screening Levels (June 2012)
(5) EPA - Regional Screening Levels (November 2012) - Tap Water; carcinogenic screening levels multiplied by 10

Table 10
Old API Separator Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	NMED WQCC Standards (mg/L)	NMED Tap Water (mg/L)	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)	Screening Levels	Source	SWMU 14-2 GW	SWMU 14-3 GW	SWMU 14-OAPIS-1GW
				1.00E+01					1207940-029	1207900-007	1210860-004
Sample Date	(3)	(4)		(1)		(2)			7/19/2012	7/18/2012	10/16/2012
Total Metals (mg/l)											
Antimony	-	1.46E-02	n	6.00E-03	n	**6.00E-03**	6.00E-03	(2)	0.00085	<0.0025	<0.0025
Arsenic	1.00E-01	4.48E-04	c	4.50E-05	c	**1.00E-02**	1.00E-02	(2)	**0.012**	**0.024**	0.0085
Barium	**1.00E+00**	7.30E+00	n	2.90E+00	n	2.00E+00	1.00E+00	(3)	0.54	**2.8**	0.68
Beryllium	-	7.30E-02	n	1.60E-02	n	**4.00E-03**	4.00E-03	(2)	0.0021	**0.042**	<0.002
Cadmium	**1.00E-02**	1.83E-02	n	-	-	-	1.00E-02	(3)	<0.002	<0.02	<0.002
Chromium	**5.00E-02**	4.31E-04	n	1.60E+00	n	-	5.00E-02	(3)	**0.075**	**0.38**	**0.012**
Cobalt	**5.00E-02**	-	-	4.70E-03	n	-	5.00E-02	(3)	0.038	**0.12**	0.044
Cyanide, Total	**2.00E-01**	2.19E-02	n	1.40E-03	n	2.00E-01	2.00E-01	(3)	**0.216**		0.09
Iron, Total	**1.00E+00**	2.56E+01	n	1.10E+01	n	-	1.00E+00	(3)	**31**	**120**	**5.6**
Lead	5.00E-02	-	-	-	L	**1.50E-02**	1.50E-02	(2)	**0.044**	**0.19**	0.01
Manganese	**2.00E-01**	8.76E-01	n	-	-	-	2.00E-01	(3)	**1.3**	**45**	**2**
Mercury	**2.00E-03**	6.26E-04	n	6.30E-04	n	2.00E-03	2.00E-03	(3)	0.000033	0.00011	<0.0002
Nickel	**2.00E-01**	7.30E-01	n	3.00E+00	n	-	2.00E-01	(3)	0.2	0.18	0.13
Selenium	**5.00E-02**	1.83E-01	n	7.80E-02	n	5.00E-02	5.00E-02	(3)	0.023	0.0096	0.016
Silver	**5.00E-02**	1.83E-01	n	7.10E-02	n	-	5.00E-02	(3)	<0.005	<0.05	<0.005
Vanadium	-	**1.83E-01**	n	7.80E-02	n	-	1.83E-01	(4)	0.029	**0.52**	<0.05
Zinc	**1.00E+01**	1.10E+01	n	4.70E+00	n	-	1.00E+01	(3)	0.32	1.1	0.099
Chloride	-	-	-	-	-	-	-		-	-	<0.5
Fluoride	**1.60E+00**	1.46E+00	n	9.30E-01	n	-	1.60E+00	(3)	-	-	<0.1
Sulfate	-	-	-	-	-	-	-		-	-	<0.5
Dissolved Metals (mg/l)											
Antimony (Dissolved)	-	1.46E-02	n	6.00E-03	n	**6.00E-03**	6.00E-03	(2)	<0.005	-	-
Arsenic (Dissolved)	1.00E-01	4.48E-04	c	4.50E-05	c	**1.00E-02**	1.00E-02	(2)	**0.011**	-	-
Barium (Dissolved)	**1.00E+00**	7.30E+00	n	2.90E+00	n	2.00E+00	1.00E+00	(3)	0.18	-	-
Beryllium (Dissolved)	-	7.30E-02	n	1.60E-02	n	**4.00E-03**	4.00E-03	(2)	<0.002	-	-
Cadmium (Dissolved)	**1.00E-02**	1.83E-02	n	-	-	-	1.00E-02	(3)	<0.002	-	-
Chromium (Dissolved)	**5.00E-02**	5.48E+01	n	1.60E+00	n	-	5.00E-02	(3)	0.0077	-	-
Cobalt (Dissolved)	**5.00E-02**	-	-	4.70E-03	n	-	5.00E-02	(3)	0.029	-	-
Iron, Total (Dissolved)	**1.00E+00**	2.56E+01	n	1.40E-03	n	-	1.00E+00	(3)	0.14	-	-
Lead (Dissolved)	5.00E-02	-	-	1.10E+01	L	**1.50E-02**	1.50E-02	(2)	<0.005	-	-
Manganese (Dissolved)	**2.00E-01**	8.76E-01	n	-	-	-	2.00E-01	(3)	**0.54**	-	-
Nickel (Dissolved)	**2.00E-01**	7.30E-01	n	3.00E+00	n	-	2.00E-01	(3)	0.18	-	-
Selenium (Dissolved)	**5.00E-02**	1.83E-01	n	7.80E-02	n	5.00E-02	5.00E-02	(3)	0.023	-	-
Silver (Dissolved)	**5.00E-02**	1.83E-01	n	7.10E-02	n	-	5.00E-02	(3)	<0.005	-	-
Vanadium (Dissolved)	-	**1.83E-01**	n	7.80E-02	n	-	1.83E-01	(4)	<0.05	-	-
Zinc (Dissolved)	**1.00E+01**	1.10E+01	n	4.70E+00	n	-	1.00E+01	(3)	0.13	-	-
Volatile Organic Compounds - (EPA Method 8260B) (mg/l)											
1,1,1,2-Tetrachloroethane	-	**5.24E-03**	c	5.00E-04	c	-	5.24E-03	(4)	<0.01	<0.005	<0.01
1,1,1-Trichloroethane	**6.00E-02**	9.13E+00	n	7.50E+01	n	2.00E-01	6.00E-02	(3)	<0.01	<0.005	<0.01
1,1,2,2-Tetrachloroethane	**2.00E-02**	6.71E-04	c	6.60E-04	c	-	2.00E-02	(3)	<0.02	<0.01	<0.02
1,1,2-Trichloroethane	1.00E-01	4.16E-04	n	2.40E-03	c**	**5.00E-03**	5.00E-03	(2)	<0.01	<0.005	<0.01
1,1-Dichloroethane	**2.50E-02**	2.42E-02	c	2.40E-02	c	-	2.50E-02	(3)	<0.01	0.0044	<0.01
1,1-Dichloroethene	**5.00E-03**	3.40E-01	n	2.60E-01	n	7.00E-03	5.00E-03	(3)	<0.01	0.0019	<0.01
1,1-Dichloropropene	-	-	-	-	-	-	-		<0.01	<0.005	<0.01
1,2,3-Trichlorobenzene	-	-	-	**5.20E-02**	n	-	5.20E-02	(1)	<0.01	<0.005	<0.01
1,2,3-Trichloropropane	-	**7.18E-06**	c	6.50E-06	c	-	7.18E-06	(4)	<0.02	<0.01	<0.02
1,2,4-Trichlorobenzene	-	4.12E-03	n	9.90E-03	c**	**7.00E-02**	7.00E-02	(2)	<0.01	<0.005	<0.01
1,2,4-Trimethylbenzene	-	-	-	**1.50E-02**	n	-	1.50E-02	(1)	**0.085**	**0.082**	<0.01
1,2-Dibromo-3-chloropropane	-	3.16E-06	c	3.20E-06	c	**2.00E-04**	2.00E-04	(2)	<0.02	<0.01	<0.02
1,2-Dibromoethane (EDB)	1.00E-04	6.53E-05	c	6.50E-05	c	**5.00E-05**	5.00E-05	(2)	<0.01	<0.005	<0.01
1,2-Dichlorobenzene	-	3.70E-01	n	2.80E-01	n	**6.00E-01**	6.00E-01	(2)	<0.01	<0.005	<0.01
1,2-Dichloroethane (EDC)	1.00E-02	1.49E-03	c	1.50E-03	c*	**5.00E-03**	5.00E-03	(2)	<0.01	<0.005	<0.01
1,2-Dichloropropane	-	3.86E-03	c	3.80E-03	c*	**5.00E-03**	5.00E-03	(2)	<0.01	<0.005	<0.01
1,3,5-Trimethylbenzene	-	-	-	**8.70E-02**	n	-	8.70E-02	(1)	0.0079	0.0057	<0.01
1,3-Dichlorobenzene	-	-	-	-	-	-	-		<0.01	<0.005	<0.01
1,3-Dichloropropane	-	-	-	**2.90E-01**	n	-	2.90E-01	(1)	<0.01	<0.005	<0.01
1,4-Dichlorobenzene	-	4.27E-03	c	4.20E-03	c	**7.50E-02**	7.50E-02	(2)	<0.01	<0.005	<0.01
1-Methylnaphthalene	-	-	-	**9.70E-03**	c	-	9.70E-03	(5)	**0.061**	**0.17**	<0.04
2,2-Dichloropropane	-	-	-	-	-	-	-		<0.02	<0.01	<0.02
2-Butanone	-	**7.06E+00**	n	4.90E+00	n	-	7.06E+00	(4)	0.066	<0.05	<0.1
2-Chlorotoluene	-	**7.30E-01**	n	1.80E-01	n	-	7.30E-01	(4)	<0.01	<0.005	<0.01
2-Hexanone	-	**8.76E-01**	n	3.40E-02	n	-	8.76E-01	(4)	<0.1	<0.05	<0.1

Table 10
Old API Separator Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	NMED WQCC Standards (mg/L)	NMED Tap Water (mg/L)	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)	Screening Levels	Source	SWMU 14-2 GW	SWMU 14-3 GW	SWMU 14-OAPIS-1GW
				1.00E+01					1207940-029	1207900-007	1210860-004
Sample Date	(3)	(4)		(1)		(2)			7/19/2012	7/18/2012	10/16/2012
2-Methylnaphthalene	-	-	-	**2.70E-02**	n	-	2.70E-02	(1)	**0.039**	**0.11**	<0.04
4-Chlorotoluene	-	-	-	**1.90E-01**	n	-	1.90E-01	(1)	<0.01	<0.005	<0.01
4-Isopropyltoluene	-	-	-	-	-	-	-		<0.01	0.0033	<0.01
4-Methyl-2-pentanone	-	-	-	**1.00E+00**	n	-	1.00E+00	(1)	<0.1	<0.05	<0.1
Acetone	-	**2.18E+01**	n	1.20E+01	n	-	2.18E+01	(4)	0.42	0.0083	<0.1
Benzene	1.00E-02	4.13E-03	c	3.90E-03	c*	**5.00E-03**	5.00E-03	(2)	**0.067**	**0.097**	**0.013**
Bromobenzene	-	-	-	**5.40E-02**	n	-	5.40E-02	(1)	<0.01	<0.005	<0.01
Bromodichloromethane	-	1.17E-03	c	1.20E-02	c	**8.00E-02**	8.00E-02	(2)	<0.01	<0.005	<0.01
Bromoform	-	8.51E-02	c	7.90E-02	c*	**8.00E-02**	8.00E-02	(2)	<0.01	<0.005	<0.01
Bromomethane	-	**8.66E-03**	n	7.00E-03	n	-	8.66E-03	(4)	<0.03	<0.015	<0.03
Carbon disulfide	-	**1.04E+00**	n	7.20E-01	n	-	1.04E+00	(4)	<0.1	<0.05	<0.1
Carbon Tetrachloride	1.00E-02	4.40E-03	c	3.90E-03	c	**5.00E-03**	5.00E-03	(2)	<0.01	<0.005	<0.01
Chlorobenzene	-	9.13E-02	n	7.20E-02	n	**1.00E-01**	1.00E-01	(2)	<0.01	<0.005	<0.01
Chloroethane	-	**2.09E+01**	n	2.10E+01	n	-	2.09E+01	(4)	<0.02	<0.01	<0.02
Chloroform	1.00E-01	1.93E-03	c	1.90E-03	c	**8.00E-02**	8.00E-02	(2)	<0.01	<0.005	<0.01
Chloromethane	-	**1.88E-01**	n	1.90E-01	n	-	1.88E-01	(4)	<0.03	<0.015	<0.03
cis-1,2-DCE	-	7.30E-02	n	2.80E-01	n	**7.00E-02**	7.00E-02	(2)	<0.01	<0.005	<0.01
cis-1,3-Dichloropropene	-	**4.33E-03**	c	-	-	-	4.33E-03	(4)	<0.01	<0.005	<0.01
Dibromochloromethane	-	1.47E-03	c	1.50E-03	c	**8.00E-02**	8.00E-02	(2)	<0.01	<0.005	<0.01
Dibromomethane	-	**8.16E-03**	n	7.90E-03	n	-	8.16E-03	(4)	<0.01	<0.005	<0.01
Dichlorodifluoromethane	-	**2.03E-01**	n	1.90E-01	n	-	2.03E-01	(4)	<0.01	<0.005	<0.01
Ethylbenzene	7.50E-01	1.48E-02	c	1.30E-02	c	**7.00E-01**	7.00E-01	(2)	0.049	0.054	<0.01
Hexachlorobutadiene	-	**8.62E-03**	c	2.60E-03	c*	-	8.62E-03	(4)	<0.01	<0.005	<0.01
Isopropylbenzene (Cumene)	-	**6.79E-01**	n	3.90E-01	n	-	6.79E-01	(4)	0.0063	0.0081	<0.01
Methyl tert-butyl ether (MTBE)	-	**1.25E-01**	c	1.20E-01	c	-	1.25E-01	(4)	**0.31**	**0.25**	**0.44**
Methylene Chloride	1.00E-01	1.86E-01	n	9.90E-02	c**	**5.00E-03**	5.00E-03	(2)	<0.03	**0.0075**	<0.03
Naphthalene	-	**1.43E-03**	c	1.40E-03	c*	-	1.43E-03	(4)	**0.042**	**0.045**	<0.02
n-Butylbenzene	-	-	-	**7.80E-01**	n	-	7.80E-01	(1)	<0.01	0.0043	<0.03
n-Propylbenzene	-	-	-	**5.30E-01**	n	-	5.30E-01	(1)	0.01	0.012	<0.01
sec-Butylbenzene	-	-	-	-	-	-	-		<0.01	0.0035	<0.01
Styrene	-	1.62E+00	n	1.10E+00	n	**1.00E-01**	1.00E-01	(2)	<0.01	<0.005	<0.01
tert-Butylbenzene	-	-	-	-	-	-	-		<0.01	<0.005	<0.01
Tetrachloroethene (PCE)	2.00E-02	1.08E-03	c	9.70E-02	c**	**5.00E-03**	5.00E-03	(2)	<0.01	<0.005	<0.01
Toluene	**7.50E-01**	2.28E+00	n	8.60E-01	n	1.00E+00	7.50E-01	(3)	<0.01	0.013	<0.01
trans-1,2-DCE	-	1.07E-01	n	8.60E-02	n	**1.00E-01**	1.00E-01	(2)	<0.01	<0.005	<0.01
trans-1,3-Dichloropropene	-	-	-	-	-	-	-		<0.01	<0.005	<0.01
Trichloroethene (TCE)	1.00E-01	3.40E-03	n	4.40E-03	c**	**5.00E-03**	5.00E-03	(2)	<0.01	<0.005	<0.01
Trichlorofluoromethane	-	**1.29E+00**	n	1.10E+00	n	-	1.29E+00	(4)	<0.01	<0.005	<0.01
Vinyl chloride	**1.00E-03**	1.62E-04	c	1.50E-04	c	2.00E-03	1.00E-03	(3)	<0.01	<0.005	<0.01
Xylenes, Total	**6.20E-01**	2.03E-01	n	1.90E-01	n	1.00E+01	6.20E-01	(3)	0.045	0.044	<0.015
Semi Volatile Organics - (EPA Method 8270C) (mg/l)											
1,2,4-Trichlorobenzene	-	4.12E-03	n	9.90E-03	c**	**7.00E-02**	7.00E-02	(2)	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	-	3.70E-01	n	2.80E-01	n	**6.00E-01**	6.00E-01	(2)	<0.01	<0.01	<0.01
1,3-Dichlorobenzene	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
1,4-Dichlorobenzene	-	4.27E-03	c	4.20E-03	c	**7.50E-02**	7.50E-02	(2)	<0.01	<0.01	<0.01
1-Methylnaphthalene	-	-	-	**9.70E-03**	c	-	9.70E-03	(5)	<0.01	**0.14**	<0.01
2,4,5-Trichlorophenol	-	**3.65E+00**	n	8.90E-01	n	-	3.65E+00	(4)	<0.01	<0.01	<0.01
2,4,6-Trichlorophenol	-	**3.65E-02**	n	3.50E-02	c**	-	3.65E-02	(4)	<0.01	<0.01	<0.01
2,4-Dichlorophenol	-	**1.10E-01**	n	3.50E-02	n	-	1.10E-01	(4)	<0.02	<0.02	<0.02
2,4-Dimethylphenol	-	**7.30E-01**	n	2.70E-01	n	-	7.30E-01	(4)	0.027	0.034	<0.01
2,4-Dinitrophenol	-	**7.30E-02**	n	3.00E-02	n	-	7.30E-02	(4)	<0.02	<0.02	<0.02
2,4-Dinitrotoluene	-	**2.17E-03**	c	2.00E-03	c	-	2.17E-03	(4)	<0.01	<0.01	<0.01
2,6-Dinitrotoluene	-	**3.65E-02**	n	1.50E-02	n	-	3.65E-02	(4)	<0.01	<0.01	<0.01
2-Chloronaphthalene	-	**1.21E-03**	n	5.50E-01	n	-	1.21E-03	(4)	<0.01	<0.01	<0.01
2-Chlorophenol	-	**1.83E-01**	n	7.10E-02	n	-	1.83E-01	(4)	<0.01	<0.01	<0.01
2-Methylnaphthalene	-	-	-	**2.70E-02**	n	-	2.70E-02	(1)	<0.01	**0.077**	<0.01
2-Methylphenol	-	-	-	**7.20E-01**	n	-	7.20E-01	(1)	<0.01	0.0073	<0.01
2-Nitroaniline	-	-	-	**1.50E+00**	n	-	1.50E+00	(1)	<0.01	<0.01	<0.01
2-Nitrophenol	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
3,3´-Dichlorobenzidine	-	**1.49E-03**	c	1.10E-03	c	-	1.49E-03	(4)	<0.01	<0.01	<0.01
3+4-Methylphenol	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
3-Nitroaniline	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
4,6-Dinitro-2-methylphenol	-	-	-	**1.20E-03**	n	-	1.20E-03	(1)	<0.02	<0.02	<0.02
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-		<0.01	<0.01	<0.01

Table 10
Old API Separator Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	NMED WQCC Standards (mg/L)	NMED Tap Water (mg/L)	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)	Screening Levels	Source	SWMU 14-2 GW	SWMU 14-3 GW	SWMU 14-OAPIS-1GW
				1.00E+01					1207940-029	1207900-007	1210860-004
Sample Date	(3)	(4)		(1)		(2)			7/19/2012	7/18/2012	10/16/2012
4-Chloro-3-methylphenol	-	-	-	**1.10E+00**	n	-	1.10E+00	(1)	<0.01	<0.01	<0.01
4-Chloroaniline	-	-	-	**3.20E-03**	c	-	3.20E-03	(5)	<0.01	<0.01	<0.01
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
4-Nitroaniline	-	-	-	**3.30E-02**	c*	-	3.30E-02	(5)	<0.02	<0.02	<0.01
4-Nitrophenol	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
Acenaphthene	-	**2.19E+00**	n	4.00E-01	n	-	2.19E+00	(4)	<0.01	<0.01	<0.01
Acenaphthylene	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
Aniline	-	-	-	**1.20E-01**	c**	-	1.20E-01	(5)	<0.01	<0.01	<0.01
Anthracene	-	**1.10E+01**	n	1.30E+00	n	-	1.10E+01	(4)	<0.01	<0.01	<0.01
Azobenzene	-	-	-	**1.00E-03**	c	-	1.00E-03	(5)	<0.01	<0.01	<0.01
Benz(a)anthracene	-	**2.95E-04**	c	2.90E-04	c	-	2.95E-04	(4)	<0.01	<0.01	<0.01
Benzo(a)pyrene	7.00E-04	2.95E-05	c	2.90E-05	c	**2.00E-04**	2.00E-04	(2)	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	-	**2.95E-04**	c	2.90E-04	c	-	2.95E-04	(4)	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
Benzo(k)fluoranthene	-	**2.95E-03**	c	2.90E-03	c	-	2.95E-03	(4)	<0.01	<0.01	<0.01
Benzoic acid	-	-	-	**5.80E+01**	n	-	5.80E+01	(1)	<0.02	<0.02	<0.02
Benzyl alcohol	-	-	-	**1.50E+00**	n	-	1.50E+00	(1)	<0.01	<0.01	<0.01
Bis(2-chloroethoxy)methane	-	-	-	**4.60E-02**	n	-	4.60E-02	(1)	<0.01	<0.01	<0.01
Bis(2-chloroethyl)ether	-	**1.19E-04**	c	1.20E-04	c	-	1.19E-04	(4)	<0.01	<0.01	<0.01
Bis(2-chloroisopropyl)ether	-	**9.60E-03**	c	3.10E-03	c	-	9.60E-03	(4)	<0.01	<0.01	<0.01
Bis(2-ethylhexyl)phthalate	-	4.80E-02	c	4.80E-02	c*	**6.00E-03**	6.00E-03	(2)	<0.01	<0.01	<0.01
Butyl benzyl phthalate	-	-	-	**1.40E-01**	c*	-	1.40E-01	(5)	<0.01	<0.01	<0.01
Carbazole	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
Chrysene	-	**2.95E-02**	c	2.90E-02	c	-	2.95E-02	(4)	<0.01	<0.01	<0.01
Dibenz(a,h)anthracene	-	**2.95E-05**	c	2.90E-05	c	-	2.95E-05	(4)	<0.01	<0.01	<0.01
Dibenzofuran	-	-	-	**5.80E-03**	n	-	2.20E-01	(1)	<0.01	<0.01	<0.01
Diethyl phthalate	-	**2.92E+01**	n	1.10E+01	n	-	2.92E+01	(4)	<0.01	<0.01	<0.01
Dimethyl phthalate	-	**3.65E+02**	n	-	-	-	3.65E+02	(4)	<0.01	<0.01	<0.01
Di-n-butyl phthalate	-	**3.65E+00**	n	6.70E-01	n	-	3.65E+00	(4)	0.02	<0.01	<0.01
Di-n-octyl phthalate	-	-	-	-	-	-	-		<0.01	<0.01	<0.02
Fluoranthene	-	**1.46E+00**	n	6.30E-01	n	-	1.46E+00	(4)	<0.01	<0.01	<0.01
Fluorene	-	**1.46E+00**	n	2.20E-01	n	-	1.46E+00	(4)	<0.01	<0.01	<0.01
Hexachlorobenzene	-	4.20E-04	c	4.20E-04	c	**1.00E-03**	1.00E-03	(2)	<0.01	<0.01	<0.01
Hexachlorobutadiene	-	**8.62E-03**	c	2.60E-03	c*	-	8.62E-03	(4)	<0.01	<0.01	<0.01
Hexachlorocyclopentadiene	-	2.19E-01	n	2.20E-02	n	**5.00E-02**	5.00E-02	(2)	<0.01	<0.01	<0.01
Hexachloroethane	-	**1.68E-02**	c	7.90E-03	c**	-	1.68E-02	(4)	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	-	**2.95E-04**	c	2.90E-04	c	-	2.95E-04	(4)	<0.01	<0.01	<0.01
Isophorone	-	**7.07E-01**	c	6.70E-01	c*	-	7.07E-01	(4)	<0.01	<0.01	<0.01
Naphthalene	-	**1.43E-03**	c	1.40E-03	c*	-	1.43E-03	(4)	<0.01	**0.024**	<0.01
Nitrobenzene	-	**1.22E-03**	c	1.20E-03	c*	-	1.22E-03	(4)	<0.01	<0.01	<0.01
N-Nitrosodimethylamine				**9.30E-05**					<0.01	<0.01	<0.01
N-Nitrosodi-n-propylamine	-	-	-	1.00E-01	c	-	9.30E-05	(5)	<0.01	<0.01	<0.01
N-Nitrosodiphenylamine	-	**1.37E-01**	c	3.50E-04	c	**-**	1.37E-01	(4)	<0.01	<0.01	<0.01
Pentachlorophenol	-	1.68E-03	c	-	c	**1.00E-03**	1.00E-03	(2)	<0.02	<0.02	<0.02
Phenanthrene	-	**1.10E+00**	n	-	-	-	1.10E+00	(4)	<0.01	0.02	<0.01
Phenol	**-**	**1.10E+01**	n	8.70E-02	n	-	1.10E+01	(4)	<0.01	<0.01	<0.01
Pyrene	-	**1.10E+00**	n	**1.50E-02**	n	-	1.10E+00	(4)	<0.01	<0.01	<0.01
Pyridine	-	-	-	**1.50E-01**	n	-	1.50E-01	(1)	<0.01	<0.01	<0.01
Total Petroleum Hydrocarbons (method 8015) (mg/l)											
Diesel Range Organics (DRO)	-	2.00E-01	-	-	-	-	-		6.5	83	<1
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-		1.2	1.5	<0.5
Motor Oil Range Organics (MRO)	-	-	-	-	-	-	-		<5	<50	<5

-- No screening level or analytical result available
450 - bolded value exceeds screening level
(1) EPA - Regional Screening Levels (November 2012) - Tap Water
(2) EPA - Regional Screening Levels (November 2012) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3103 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED Tap Water Screening Levels (June 2012)
(5) EPA - Regional Screening Levels (November 2012) - Tap Water; carcinogenic screening levels multiplied by 10

TABLE 11
Groundwater Field Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

		Ground Water Data						
Well	**Date**	**Well Volume**	**Temp (degrees C)**	**Specific Conductivity (mS/cm)**	**Dissolved Oxygen (mg/L)**	**pH**	**ORP**	**Purge Volume (calculated / actual - gallons)**
OAPIS-1	10/15/2012	0	19.24	5.618	3.73	7.78	-47.1	9.15/9.25
		1	18.19	5.596	4.53	7.24	-95.2	
		2	16.97	5.450	4.71	6.98	-79.1	
		3	15.99	5.331	4.94	6.86	-81.8	

Table 12
SWMU No. 1 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non-Residential Soil Screening Level
CARCINOGENIC CONSTITUENTS							
Metals (mg/kg)							
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	400	134.7449	6.0950
Volatile Organic Compounds - (EPA Method 8260) mg/kg							
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	35	0.21875	0.06604
Benzene	1.54E+01	(1)	1.38E+02	(4)	3.2	0.20804	0.02314
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.8	0.08474	0.00317
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	0.0444	0.00005	0.00000
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	13	0.30255	0.08235
Semi Volatile Organics - (EPA Method 8270) mg/kg							
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	1.5	0.0043	0.0003
Carcinogenic Constituents Cumulative Risk x 10^{-5}						**135.563**	**6.270**
NON-CARCINOGENIC CONSTITUENTS							
Metals (mg/kg)							
Barium	1.56E+04	(1)	4.35E+03	(4)	1300	0.0836	0.2986
Beryllium	1.56E+02	(1)	1.44E+02	(4)	1.2	0.0077	0.0083
Chromium III	1.17E+05	(1)	4.65E+05	(4)	400	0.0034	0.0009
Cobalt	2.30E+01	(2)	3.00E+02	(4)	11	0.4783	0.0367
Cyanide	4.69E+01	(1)	1.86E+02	(4)	6	0.1279	0.0323
Iron	5.48E+04	(1)	2.17E+05	(4)	24000	0.4384	0.1107
Lead	4.00E+02	(1)	8.00E+02	(4)	80	0.2000	0.1000
Manganese	1.86E+03	(1)	4.40E+02	(4)	2800	1.5014	6.3568
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.4	0.0896	0.1028
Nickel	1.56E+03	(1)	6.19E+03	(4)	16	0.0103	0.0026
Vanadium	3.91E+02	(1)	1.55E+03	(4)	53	0.1355	0.0342
Zinc	2.35E+04	(1)	9.29E+04	(4)	720	0.0307	0.0077
Volatile Organic Compounds - (EPA Method 8260) mg/kg							
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	17	0.2742	0.0654
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.8	0.0074	0.0006
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	0.0722		
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	0.0116	0.0000	0.0000
Acetone	6.66E+04	(1)	2.21E+05	(4)	54.1	0.0008	0.0002

Table 12
SWMU No. 1 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non-Residential Soil Screening Level
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	0.0156	0.0000	0.0000
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	0.0031	0.0000	0.0000
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	2.8	0.0008	0.0001
sec-Butylbenzene	-	-	-	-	0.00128	-	-
Toluene	5.27E+03	(1)	1.34E+04	(4)	3.54	0.0007	0.0003
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	24	0.0295	0.0323
Semi Volatile Organics - (EPA Method 8270) mg/kg							
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	0.64	0.0005	0.0001
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	55	0.2391	0.0250
Fluorene	2.29E+03	(1)	8.91E+03	(4)	3.7	0.0016	0.0004
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	11	0.0060	0.0015
Pyrene	1.72E+03	(1)	6.68E+03	(4)	1.5	0.0009	0.0002
Non-Carcinogenic Constituents Hazard Index						**0.562**	**0.126**

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels x 10
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels
(6) EPA Industrial - Screening Levels x 10

Table 13
SWMU No. 14 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non-Residential Soil Screening Level
CARCINOGENIC CONSTITUENTS							
Metals (mg/kg)							
Arsenic	3.90E+00	(1)	5.30E+01	(4)	1.6	0.4105	0.0302
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	400	134.7449	6.0950
Volatile Organic Compounds - (EPA Method 8260) mg/kg							
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	1	0.3557	0.0021
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	0.000918	0.0000	0.0000
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	2.2	1.1804	0.4343
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	1.2	2.0400	0.0751
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	0.82	0.05381	0.03280
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	0.000252	0.00001	0.00000
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	45	0.28125	0.08491
Benzene	1.54E+01	(1)	1.38E+02	(4)	5.9	0.38357	0.04266
Chloroform	5.86E+00	(1)	1.54E+02	(4)	0.0069	0.00118	0.00004
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	23	0.33602	0.01256
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.5	0.00166	0.00006
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	2	0.00489	0.00179
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	17	0.39565	0.10769
Semi Volatile Organics - (EPA Method 8270) mg/kg							
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	0.61	0.4132	0.0029
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	0.43	0.1605	0.0055
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	2.6	0.0075	0.0005
Chrysene	1.48E+02	(1)	2.06E+04	(4)	0.65	0.0044	0.0000
Carcinogenic Constituents Cumulative Risk x 10^{-5}						**140.775**	**6.928**
NON-CARCINOGENIC CONSTITUENTS							
Metals (mg/kg)							
Antimony	3.13E+01	(1)	1.24E+02	(4)	5.3	0.1694	0.0428
Barium	1.56E+04	(1)	4.35E+03	(4)	2400	0.1543	0.5513
Beryllium	1.56E+02	(1)	1.44E+02	(4)	1.4	0.0090	0.0097
Chromium III	1.17E+05	(1)	4.65E+05	(4)	110	0.0009	0.0002
Cobalt	2.30E+01	(2)	3.00E+02	(4)	10	0.4348	0.0333
Cyanide	4.69E+01	(1)	1.86E+02	(4)	5.5	0.1172	0.0296

Table 13
SWMU No. 14 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non-Residential Soil Screening Level
Iron	5.48E+04	(1)	2.17E+05	(4)	26000	0.4749	0.1199
Lead	4.00E+02	(1)	8.00E+02	(4)	80	0.2000	0.1000
Manganese	1.86E+03	(1)	4.40E+02	(4)	1800	0.9652	4.0865
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.4	0.0896	0.1028
Nickel	1.56E+03	(1)	6.19E+03	(4)	17	0.0109	0.0027
Vanadium	3.91E+02	(1)	1.55E+03	(4)	52	0.1330	0.0336
Zinc	2.35E+04	(1)	9.29E+04	(4)	720	0.0307	0.0077
Volatile Organic Compounds - (EPA Method 8260) mg/kg							
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	0.00104	0.0001	0.0000
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	44	0.7097	0.1692
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	16	0.0205	0.0016
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	0.055	0.0000	0.0000
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	0.46	0.0003	0.0001
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	0.37	0.0004	0.0004
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	90	0.3913	0.0409
4-Isopropyltoluene	-	-	-	-	3.4	-	-
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	0.0142	0.0000	0.0000
Acetone	6.66E+04	(1)	2.21E+05	(4)	47	0.0007	0.0002
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	0.025	0.0000	0.0000
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	0.11	0.0003	0.0003
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	0.013	0.0000	0.0001
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	6.6	0.0027	0.0024
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	4.6	0.0012	0.0001
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	8.1	0.0024	0.0004
sec-Butylbenzene	-	-	-	-	3.8	-	-
Styrene	7.28E+03	(1)	9.99E+03	(4)	0.077	0.0000	0.0000
Toluene	5.27E+03	(1)	1.34E+04	(4)	45	0.0085	0.0033
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	0.000685	0.0000	0.0000
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	120	0.1474	0.1615
Semi Volatile Organics - (EPA Method 8270) mg/kg							
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	0.52	0.0004	0.0001
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	0.66	0.0054	0.0014
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	1.1	0.0004	0.0000

Table 13
SWMU No. 14 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non-Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non-Residential Soil Screening Level
3+4-Methylphenol	-	-	-	-	2.2	-	-
4-Nitrophenol	-	-	-	-	0.22	-	-
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	2	0.0006	0.0001
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	2.3	0.0000	0.0000
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	0.32	0.0001	0.0000
Fluorene	2.29E+03	(1)	8.91E+03	(4)	3.7	0.0016	0.0004
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	11	0.0060	0.0015
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.8	0.0002	0.0000
Pyrene	1.72E+03	(1)	6.68E+03	(4)	2.6	0.0015	0.0004
Non-Carcinogenic Constituents Hazard Index						**1.302**	**0.384**

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels x 10
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels
(6) EPA Industrial - Screening Levels x 10

Table 14
SWMU No. 1 Groundwater Cumulative Risk Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	Maximum Concentration	Maximum Concentration divided by Residential Groundwater Screening Level
CARCINOGENIC CONSTITUENTS				
Metals (mg/l)				
Arsenic	4.48E-04	(4)	0.063	140.625
Volatile Organic Compounds - (EPA Method 8260) ug/l				
1-Methylnaphthalene	9.70E-03	(5)	0.011	1.13
Benzene	4.13E-03	(4)	0.024	5.81
Bromoform	8.51E-02	(4)	0.0027	0.03
Ethylbenzene	1.48E-02	(4)	0.016	1.08
Methyl tert-butyl ether (MTBE)	1.25E-01	(4)	0.31	2.49
Naphthalene	1.43E-03	(4)	0.032	22.36
Carcinogenic Constituents Cumulative Risk x 10^{-5}				**173.53**
NON-CARCINOGENIC CONSTITUENTS				
Metals (mg/l)				
Barium	7.30E+00	(4)	56	7.67
Beryllium	7.30E-02	(4)	0.21	2.88
Chromium	5.48E+01	(4)	0.31	0.01
Cobalt	4.70E-02	(5)	0.53	11.28
Cyanide, Total	2.19E-02	(4)	0.059	2.69
Iron, Total	2.56E+01	(4)	160	6.26
Lead	-		1.7	-
Manganese, Total	8.76E-01	(4)	95	108.45
Mercury	6.26E-04	(4)	0.00034	0.54
Nickel	7.30E-01	(4)	0.95	1.30
Selenium	1.83E-01	(4)	0.059	0.32
Vanadium	1.83E-01	(4)	0.2	1.10
Zinc	1.10E+01	(4)	1.1	0.10
Volatile Organic Compounds - (EPA Method 8260) mg/l				
1,2,4-Trimethylbenzene	1.50E-02	(1)	0.032	2.13
1,3,5-Trimethylbenzene	8.70E-02	(1)	0.008	0.09
2-Butanone (MEK)	7.06E+00	(4)	0.047	0.01
2-Hexanone	8.76E-01	(4)	0.016	0.02
2-Methylnaphthalene	2.70E-01	(1)	0.019	0.07
4-Isopropyltoluene	-		0.012	-
4-Methyl-2-pentanone	1.00E+00	(1)	0.015	0.02
Acetone	2.18E+01	(4)	0.27	0.01
Bromomethane	8.66E-03	(4)	0.003	0.35
Carbon disulfide	1.04E+00	(4)	0.03	0.03
Chloromethane	1.88E-01	(4)	0.0035	0.02
Isopropylbenzene (Cumene)	6.79E-01	(4)	0.0015	0.00
n-Propylbenzene	5.30E-01	(1)	0.0027	0.01
sec-Butylbenzene	-		0.0014	-
Toluene	2.28E+00	(4)	0.018	0.01
Xylenes, Total	2.03E-01	(4)	0.1	0.49
Semi Volatile Organics - (EPA Method 8270) mg/l				
2,4-Dimethylphenol	7.30E-01	(4)	0.85	1.16
2-Methylphenol	7.20E-01	(1)	0.018	0.03
2-Nitrophenol	-		0.24	-

Table 14
SWMU No. 1 Groundwater Cumulative Risk Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	Maximum Concentration	Maximum Concentration divided by Residential Groundwater Screening Level
3+4-Methylphenol	-		0.018	-
4-Nitrophenol	-		0.026	-
Dimethyl phthalate	3.65E+02	(4)	0.013	0.00
Non-Carcinogenic Constituents Hazard Index				**147.04**

- No screening level or analytical result available
(1) EPA - Regional Screening Levels (November 2012) - Tap Water
(2) EPA - Regional Screening Levels (November 2012) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3103 Standards for Ground Water of 10,000 mg/l TDS
(4) NMED Tap Water Screening Levels (June 2012)
(5) EPA - Regional Screening Levels (November 2012) - Tap Water; carcinogenic screening levels multiplied by 10

Table 15
SWMU No. 14 Groundwater Cumulative Risk Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	Maximum Concentration	Maximum Concentration divided by Residential Groundwater Screening Level
CARCINOGENIC CONSTITUENTS				
Metals (mg/l)				
Arsenic	4.48E-04	(4)	0.024	53.57
Volatile Organic Compounds - (EPA Method 8260) ug/l				
1,1-Dichloroethane	2.42E-02	(4)	0.0044	0.18
1-Methylnaphthalene	9.70E-03	(5)	0.17	17.53
Benzene	4.13E-03	(4)	0.097	23.49
Ethylbenzene	1.48E-02	(4)	0.054	3.66
Methyl tert-butyl ether (MTBE)	1.25E-01	(4)	0.44	3.53
Naphthalene	1.43E-03	(4)	0.045	31.44
Semi Volatile Organics - (EPA Method 8270) ug/l				
1-Methylnaphthalene	9.70E-03	(5)	0.14	14.43
Carcinogenic Constituents Cumulative Risk x 10^{-5}				**147.83**
NON-CARCINOGENIC CONSTITUENTS				
Metals (mg/l)				
Barium	7.30E+00	(4)	2.8	0.38
Beryllium	7.30E-02	(4)	0.042	0.58
Chromium	5.48E+01	(4)	0.38	0.01
Cobalt	4.70E-02	(5)	0.12	2.55
Cyanide, Total	2.19E-02	(4)	0.216	9.86
Iron, Total	2.56E+01	(4)	120	4.70
Lead	-		0.19	-
Manganese, Total	8.76E-01	(4)	45	51.37
Mercury	6.26E-04	(4)	0.00011	0.18
Nickel	7.30E-01	(4)	0.2	0.27
Selenium	1.83E-01	(4)	0.023	0.13
Vanadium	1.83E-01	(4)	0.52	2.85
Zinc	1.10E+01	(4)	1.1	0.10
Volatile Organic Compounds - (EPA Method 8260) mg/l				
1,1-Dichloroethene	**0.339534884**	(4)	**0.0019**	
1,2,4-Trimethylbenzene	1.50E-02	(1)	0.085	5.67
1,3,5-Trimethylbenzene	8.70E-02	(1)	0.0079	0.09
2-Butanone (MEK)	7.06E+00	(4)	0.066	0.01
2-Methylnaphthalene	2.70E-01	(1)	0.11	0.41
4-Isopropyltoluene	-		0.0033	-
Acetone	2.18E+01	(4)	0.42	0.02
Isopropylbenzene (Cumene)	6.79E-01	(4)	0.0081	0.01
Methylene Chloride	1.86E-01	(4)	0.0075	0.04
n-Butylbenzene	7.80E+00	(1)	0.0043	0.00
n-Propylbenzene	5.30E-01	(1)	0.012	0.02
sec-Butylbenzene	-		0.0035	-
Toluene	2.28E+00	(4)	0.013	0.01
Xylenes, Total	2.03E-01	(4)	0.045	0.22
Semi Volatile Organics - (EPA Method 8270) mg/l				
2,4-Dimethylphenol	7.30E-01	(4)	0.034	0.05
2-Methylphenol	7.20E-01	(1)	0.0073	0.01
Di-n-butyl phthalate	3.65E+00	(4)	0.02	0.01
Phenanthrene	1.10E+00	(4)	0.02	0.02
Non-Carcinogenic Constituents Hazard Index				**79.55**

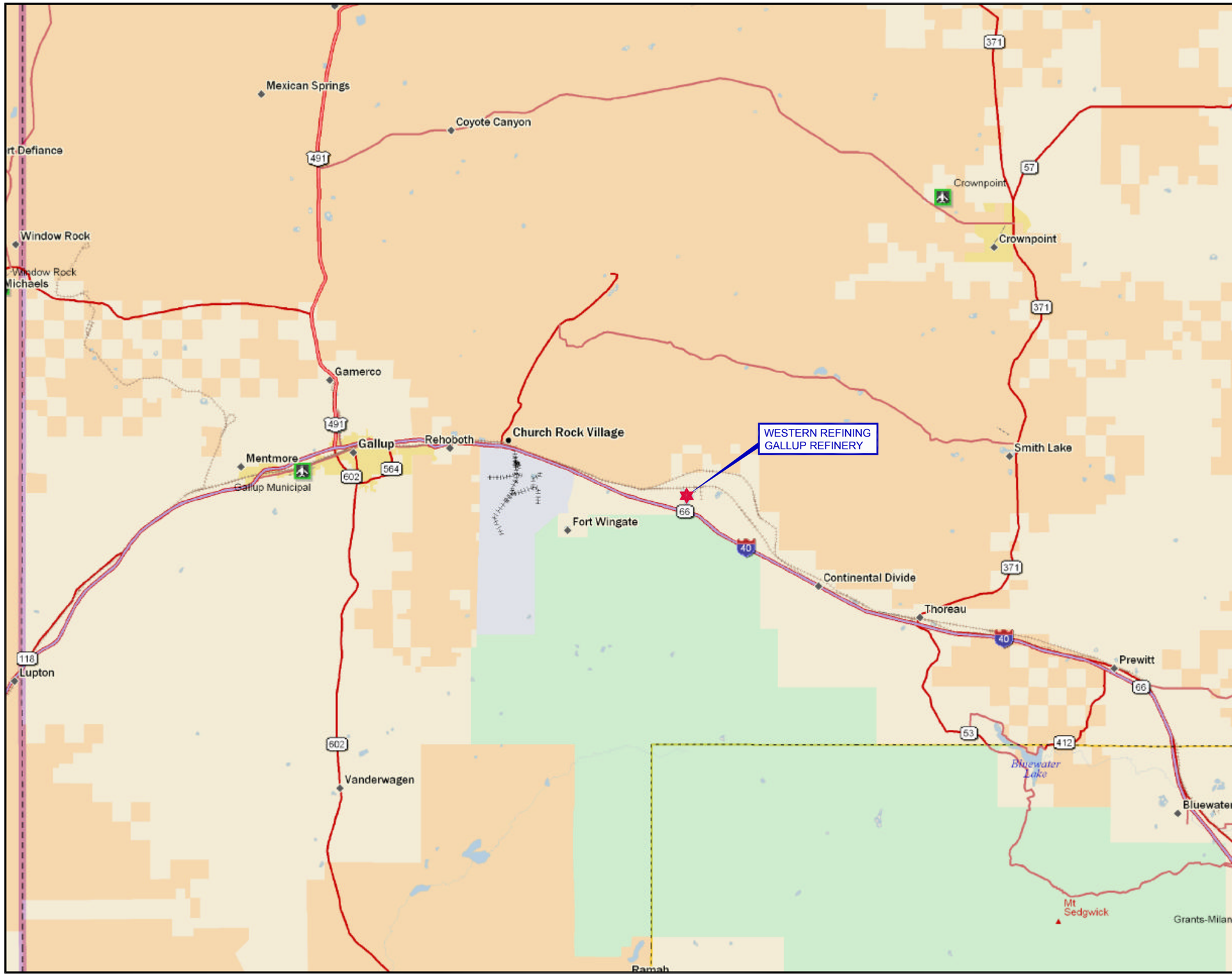
- No screening level or analytical result available

Table 15
SWMU No. 14 Groundwater Cumulative Risk Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	Maximum Concentration	Maximum Concentration divided by Residential Groundwater Screening Level

(1) EPA - Regional Screening Levels (November 2012) - Tap Water
(2) EPA - Regional Screening Levels (November 2012) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3103 Standards for Ground Water of 10,000 mg/l TDS
(4) NMED Tap Water Screening Levels (June 2012)
(5) EPA - Regional Screening Levels (November 2012) - Tap Water; carcinogenic screening levels multiplied by 10

Figures



Map Source: DeLorme Street Atlas USA 2007 Plus.

0 5
SCALE IN MILES

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining	DATE: 01/31/13	FILE: WestRef-B165

FIGURE 1
SITE LOCATION MAP
GALLUP REFINERY

RPS
Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298

EP-1

AL-2

AL-1

GWM-1

GWM-2

GWM-3

NAPIS-1

NAPIS-2

NAPIS-3

KA-1

KA-2

KA-3

NEW API SEPARATOR

OLD API SEPARATOR

FORMER DISCHARGE LINE FROM OLD SEPARATOR

BENZENE STRIPPERS

TO PILOT TRAVEL CENTER

W

E

LEGEND

PERIMETER SOIL BORING LOCATION

HAND AUGER SAMPLE LOCATION

GWM-1 GROUNDWATER WELL LOCATION

KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION

PIPELINE

0 50

SCALE IN FEET

Western Refining

GALLUP REFINERY

PROJ. NO.:Western Refining | DATE:08/16/15 | FILE:WestRef-dB54

FIGURE 2

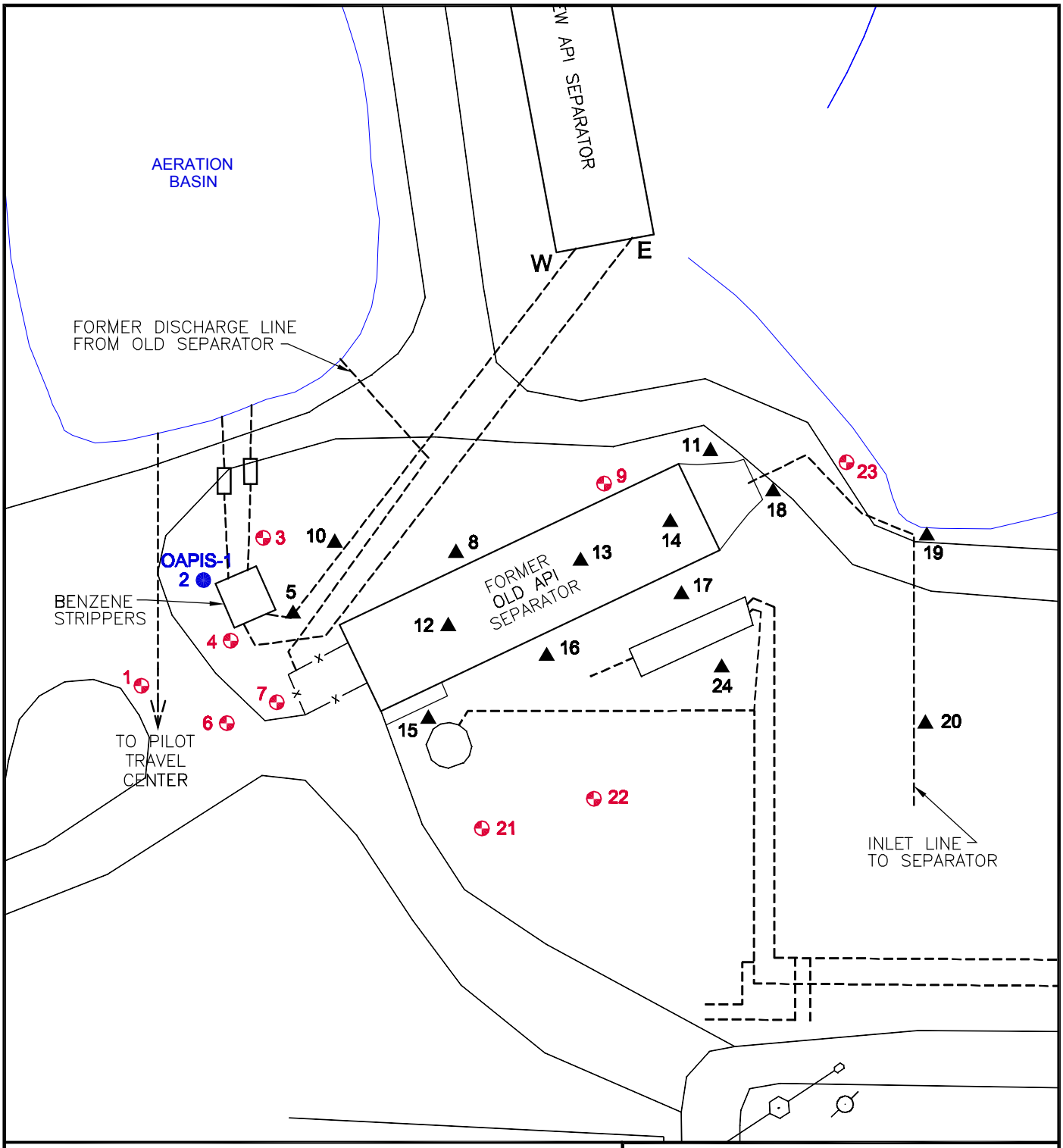
SWMU No. 1 SAMPLE LOCATIONS

GALLUP REFINERY

DiSorbo

Environmental Consulting Firm

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



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE

N

0 40
SCALE IN FEET

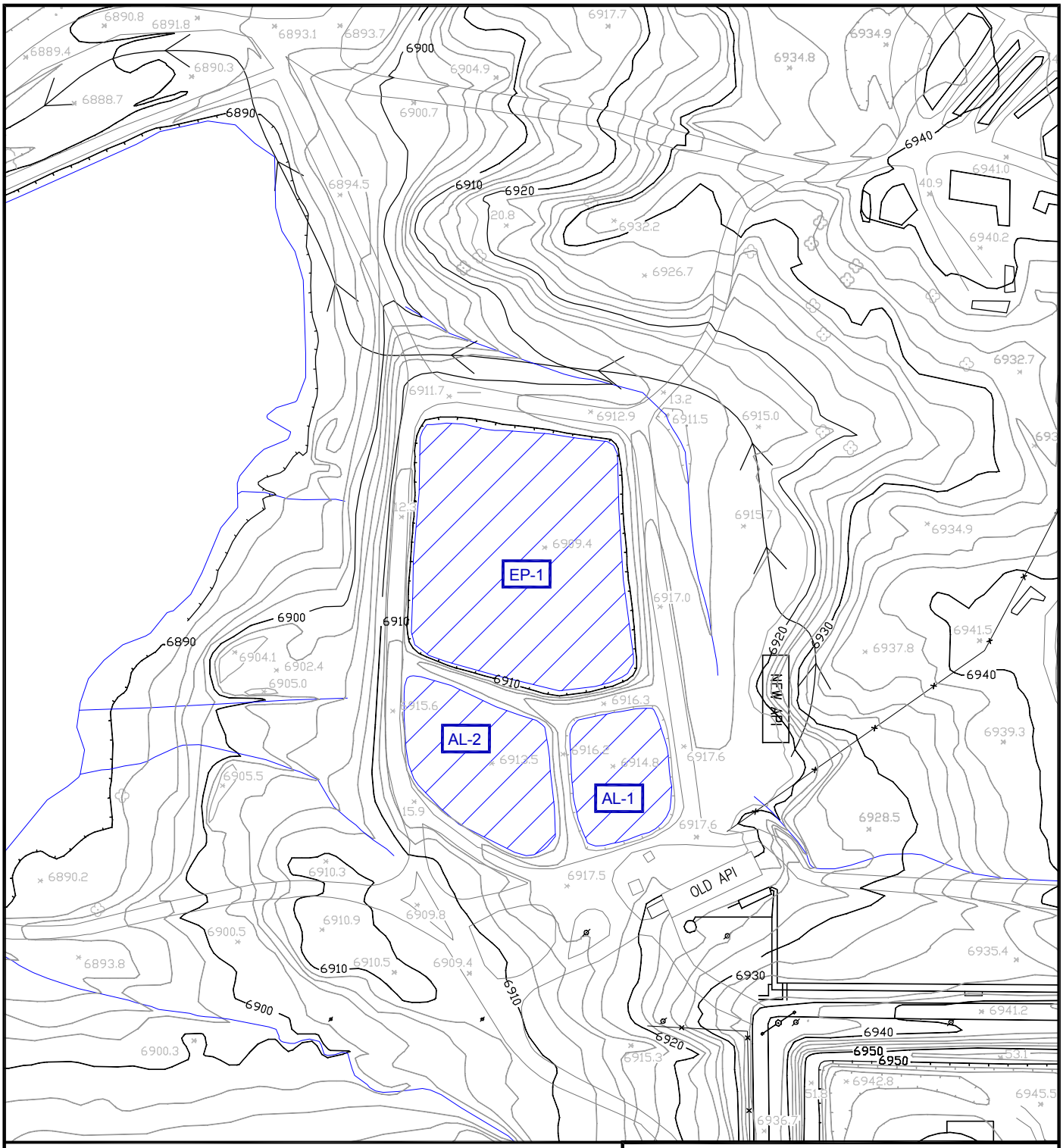
NEW MEXICO
QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:08/16/15	FILE:WestRef-dA32

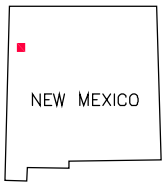
FIGURE 3
SWMU No. 14 SAMPLE LOCATIONS
GALLUP REFINERY

DiSorbo
Environmental Consulting Firm
8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

0 150
SCALE IN FEET



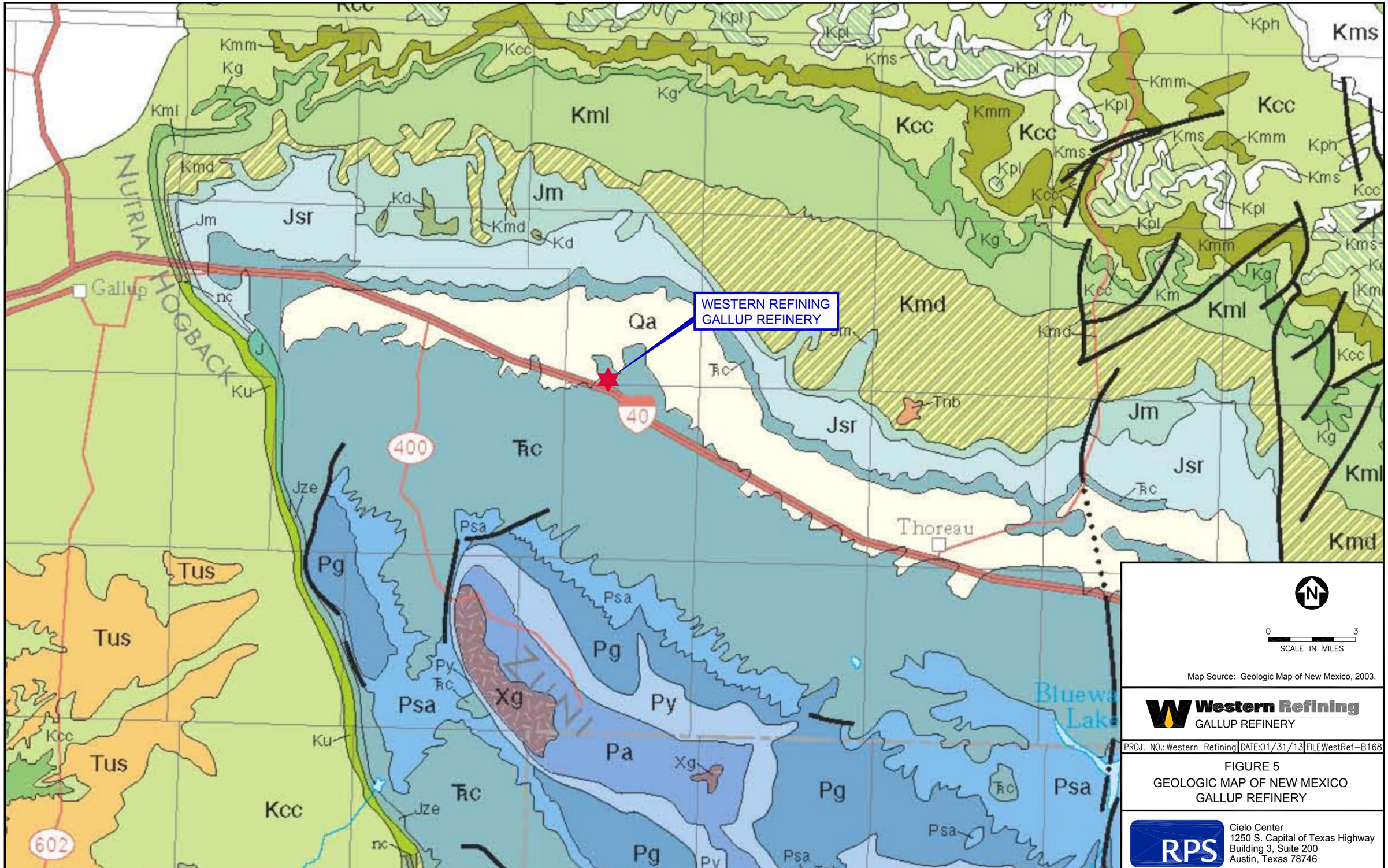
QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/31/13	FILE:WestRef-A168

FIGURE 4
TOPOGRAPHIC MAP
GALLUP REFINERY

RPS
Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298



Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining	DATE: 01/31/13	FILE: WestRef-B168

FIGURE 5
GEOLOGIC MAP OF NEW MEXICO
GALLUP REFINERY

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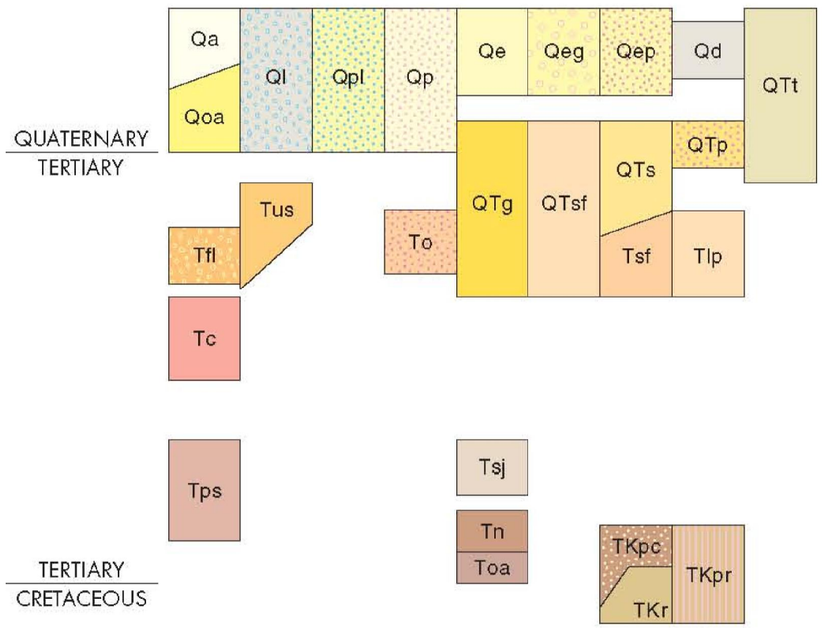
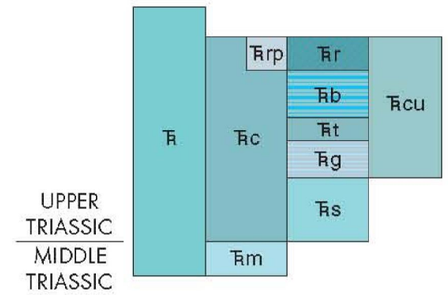
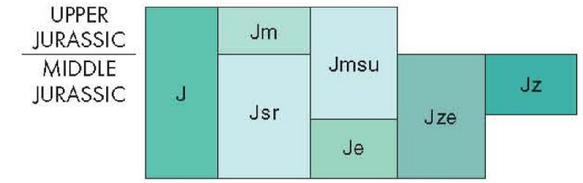
Sedimentary







DESCRIPTION OF MAP UNITS

QUATERNARY

Qa — Alluvium (Holocene to upper Pleistocene)

Ql — Landslide deposits and colluvium (Holocene to Pleistocene)—Landslide deposits on western flanks of Socorro Mountains not shown for clarity

Qpl — Lacustrine and playa deposits (Holocene)—Includes associated alluvial and eolian deposits of major lake basins

Qp — Piedmont alluvial deposits (Holocene to lower Pleistocene)—Includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include uppermost Pliocene deposits

TRIASSIC

Chinle Formation of previous workers (e.g., Stewart et al., 1972) is used here as Chinle Group, following Lucas (1993)

Ꞧ — **Triassic rocks, undivided**—Continental red beds

Ꞧrp — **Rock Point Formation of Chinle Group** (Upper Triassic)—May locally include Wingate Sandstone (Triassic)

Ꞧc — **Chinle Group** (Upper Triassic)—Map unit includes Moenkopi Formation (Middle Triassic) at base in many areas; in eastern part of state the following five formations are mapped:

Ꞧr — **Redonda Formation** (Upper Triassic)

Ꞧb — **Bull Canyon Formation** (Norian)

Ꞧt — **Trujillo Formation** (Norian)

Ꞧg — **Garita Creek Formation** (Carnian)

Ꞧs — **Santa Rosa Formation** (Carnian)—Includes Moenkopi Formation (Middle Triassic) at base in most areas

Ꞧcu — **Upper Chinle Group, Garita Creek through Redonda Formations, undivided**

Ꞧm — **Moenkopi Formation** (Middle Triassic)

JURASSIC

To compare this map nomenclature to the USGS nomenclature, see the diagram included on this sheet (at right)

J — **Upper and Middle Jurassic rocks, undivided.** In southwest includes the basalt-bearing Broken Jug Formation

Jm — **Morrison Formation**—Upper Jurassic nonmarine rocks

Jmsu — **Morrison Formation and upper San Rafael Group** (lowermost Cretaceous?-upper Jurassic)

Jz — **Zuni Sandstone** (Callovian)—Consists of undivided equivalents of the Summerville Formation and Bluff Sandstone; restricted to Zuni Basin area

Jze — **Zuni and Entrada Sandstones, undivided**

Je — **Entrada Sandstone** (Middle Jurassic)

Jsr — **San Rafael Group** (Middle Jurassic)—Consists of Entrada Sandstone, Todilto and Summerville Formations, Bluff Sandstone, and locally Zuni Sandstone (or only Acoma Tongue of Zuni)

Map Source: Geologic Map of New Mexico, 2003.

Western Refining
GALLUP REFINERY

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FIGURE 5
GEOLOGIC MAP OF NEW MEXICO
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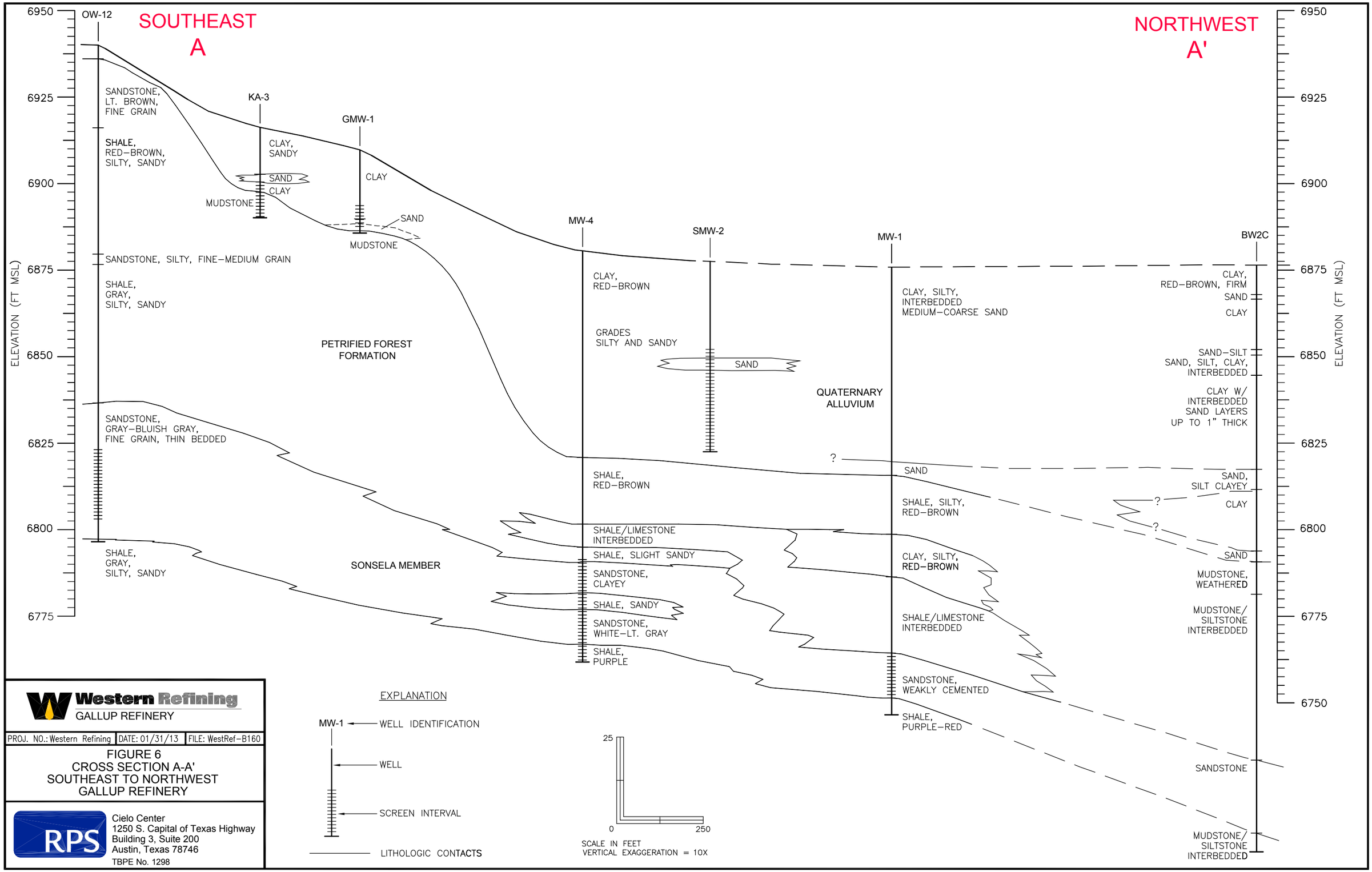

Western Refining
GALLUP REFINERY

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FIGURE 6
CROSS SECTION A-A'
SOUTHEAST TO NORTHWEST
GALLUP REFINERY

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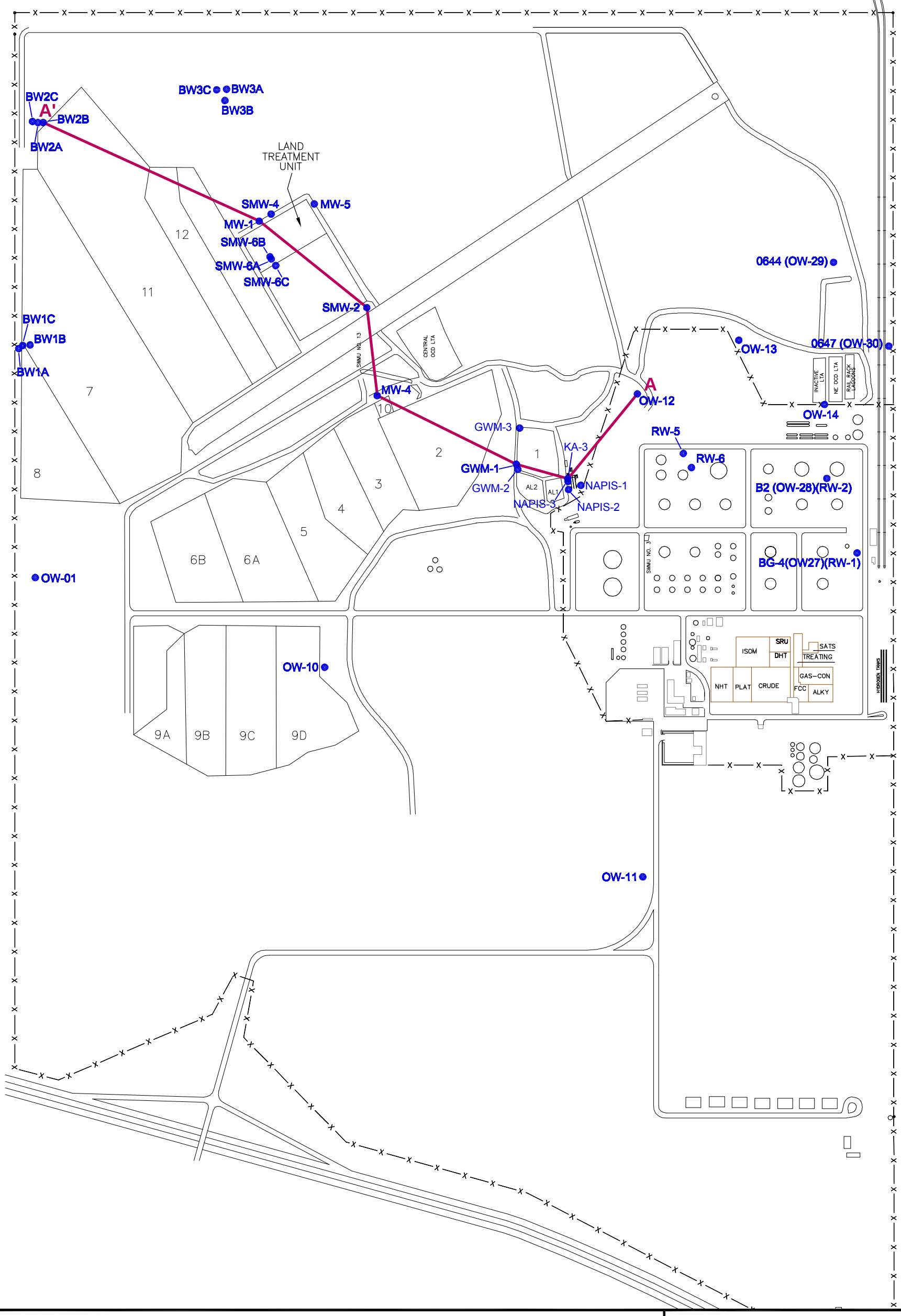

N

0 600
SCALE IN FEET

LEGEND

GWM-1 ● MONITORING WELL LOCATION

A —— A' LINE OF CROSS SECTION

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/31/13	FILE:WestRef-B166

FIGURE 6A
CROSS SECTION LOCATION MAP
GALLUP REFINERY

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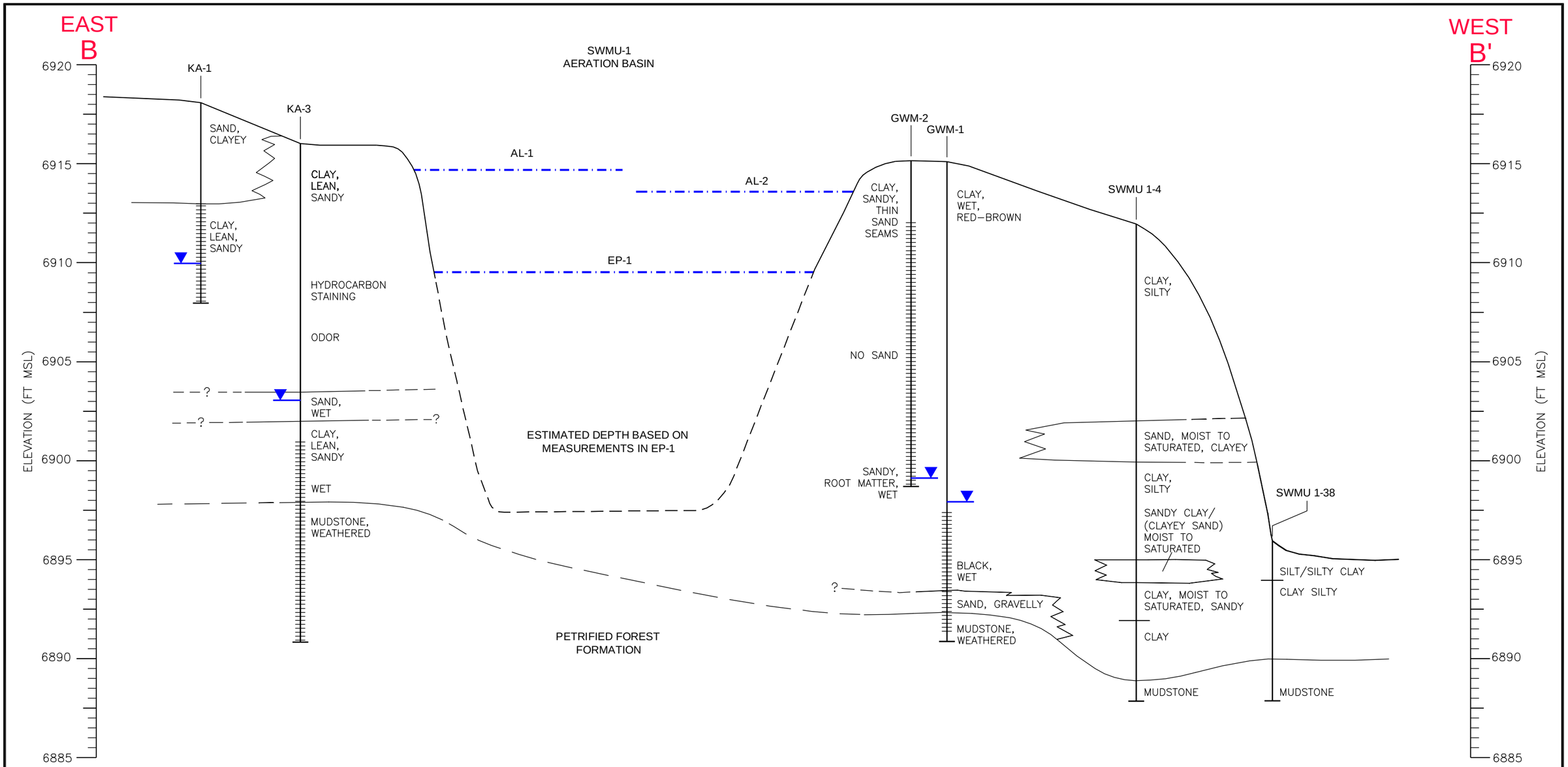

EXPLANATION

GWM-1 ← WELL IDENTIFICATION

← WELL

← WELL SCREEN INTERVAL

STATIC WATER LEVEL MEASURED 11/28/2012, EXCEPT KA–1, WHICH WAS MEASURED 6/12/2007

LITHOLOGIC CONTACTS (DASHED WHERE INFERRED)

5 0 50

SCALE IN FEET
VERTICAL EXAGGERATION = 10X

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining	DATE: 01/31/13	FILE: WestRef–B161

FIGURE 7
CROSS SECTION B-B'
EAST TO WEST
GALLUP REFINERY

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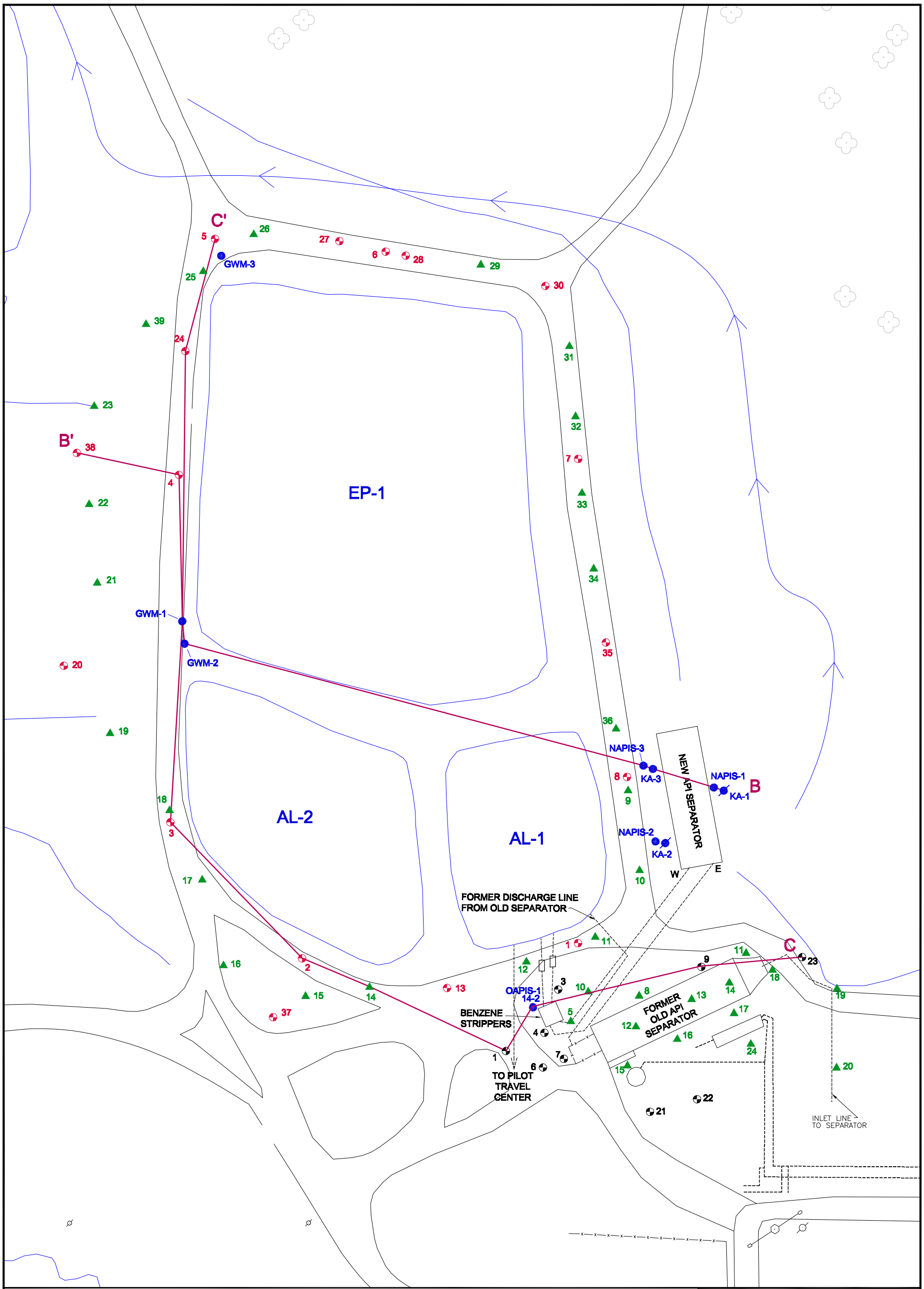

Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- SOIL BORING LOCATION
- PERIMETER SOIL BORING LOCATION
- HAND AUGER SAMPLE LOCATION
- GWM-1 GROUNDWATER WELL LOCATION
- KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
- PIPELINE
- B —— B' LINE OF CROSS SECTION

0 30 60
SCALE IN FEET

NEW MEXICO
QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining	DATE: 08/16/15	FILE: WestRef-dD01

FIGURE 7A
CROSS SECTION LOCATION MAP
GALLUP REFINERY

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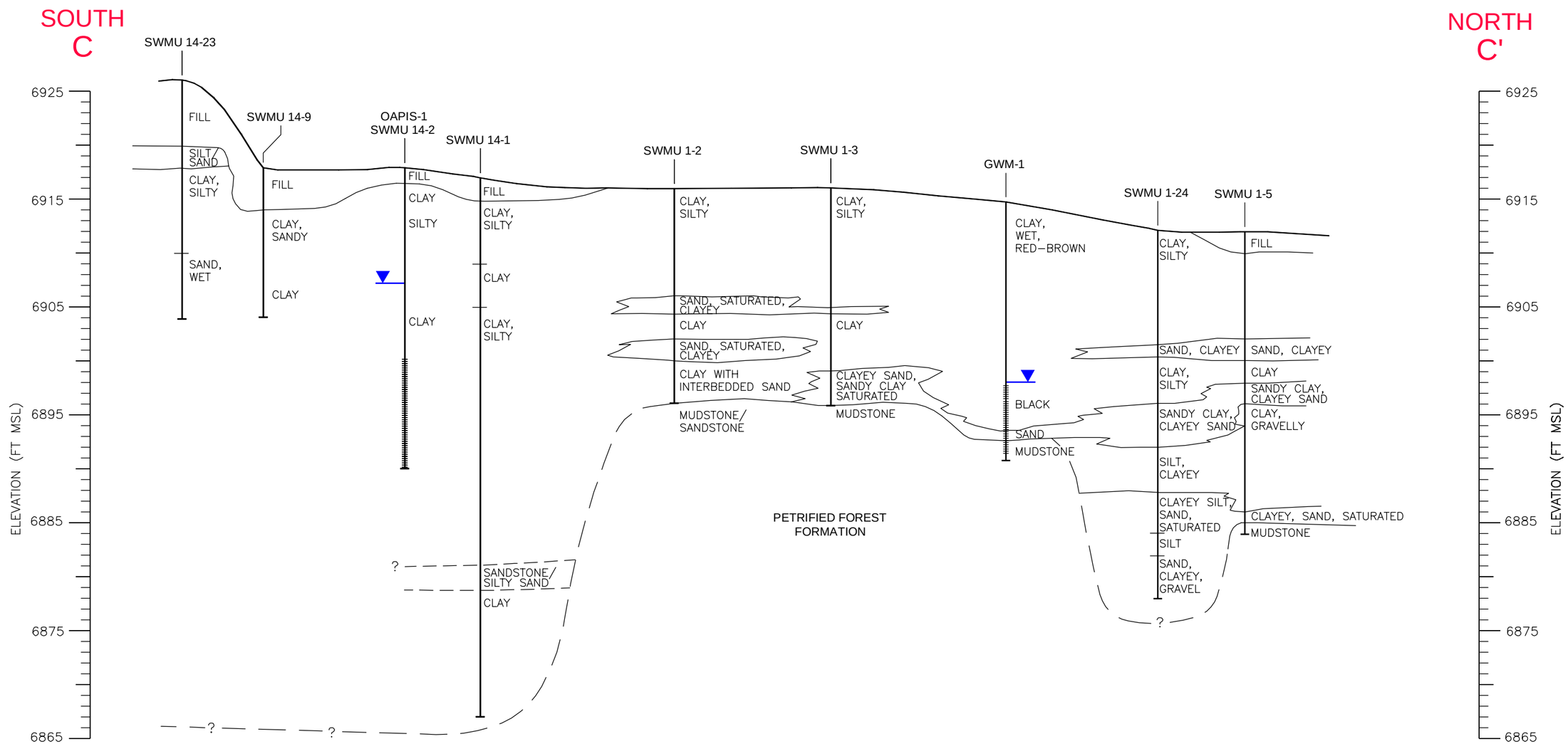
Environmental Consulting Firm
8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



EXPLANATION

GWM-1 ← WELL IDENTIFICATION

WELL

WELL SCREEN INTERVAL

STATIC WATER LEVEL MEASURED FALL 2012

LITHOLOGIC CONTACTS (DASHED WHERE INFERRED)

10 0 100

SCALE IN FEET
VERTICAL EXAGGERATION = 10X

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining	DATE: 01/31/13	FILE: WestRef–B162

FIGURE 8
CROSS SECTION C-C'
SOUTH TO NORTH
GALLUP REFINERY

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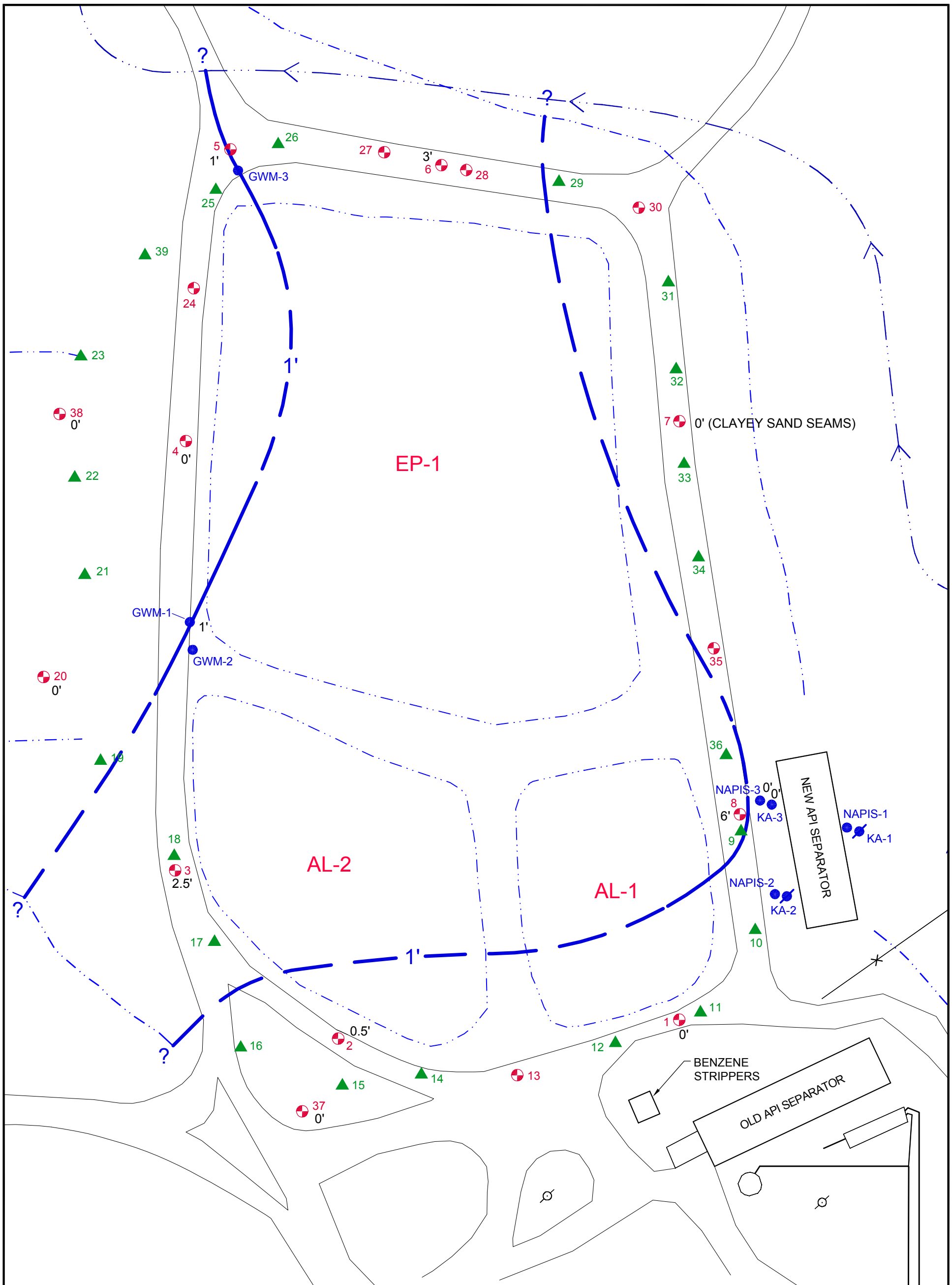

LEGEND

0.5' THICKNESS OF PERMEABLE LAYER (SAND AND CLAYEY SAND / SANDY CLAY) THAT DIRECTLY OVER LIES PETRIFIED FOREST FORMATION BEDROCK (FT)

PERIMETER SOIL BORING LOCATION

HAND AUGER SAMPLE LOCATION

GWM-1 GROUNDWATER WELL LOCATION

KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION

0 50
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining | DATE:01/31/13 | FILE:WestRef-B163

FIGURE 9
SAND ISOPACH MAP
SWMU No. 1
GALLUP REFINERY

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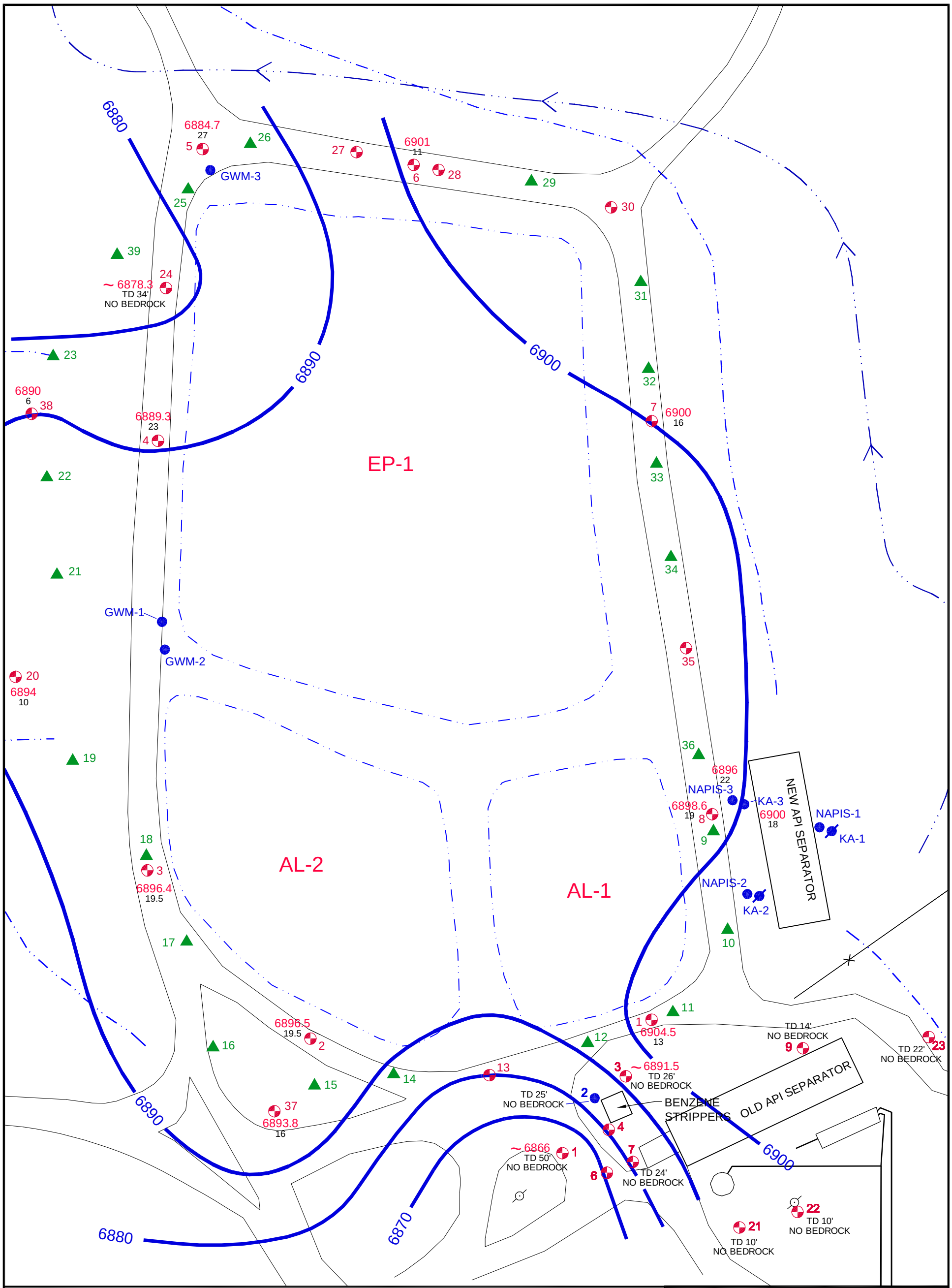

LEGEND

6896.4	ELEVATION ON TOP OF PETRIFIED FOREST FORMATION (MSL)
19.5	DEPTH TO TOP OF PETRIFIED FOREST FORMATION
~	ELEVATION ESTIMATED AS PETRIFIED FOREST FORMATION NOT REACHED IN BORING
TD	TOTAL DEPTH OF BORING
	PERIMETER SOIL BORING LOCATION
	HAND AUGER SAMPLE LOCATION
GWM-1	GROUNDWATER WELL LOCATION
KA-1	PLUGGED & ABANDONED MONITOR WELL LOCATION

N

0 50
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining | DATE:01/31/13 | FILE:WestRef-B164

FIGURE 10
PALEOTOPOGRAPHIC MAP
GALLUP REFINERY

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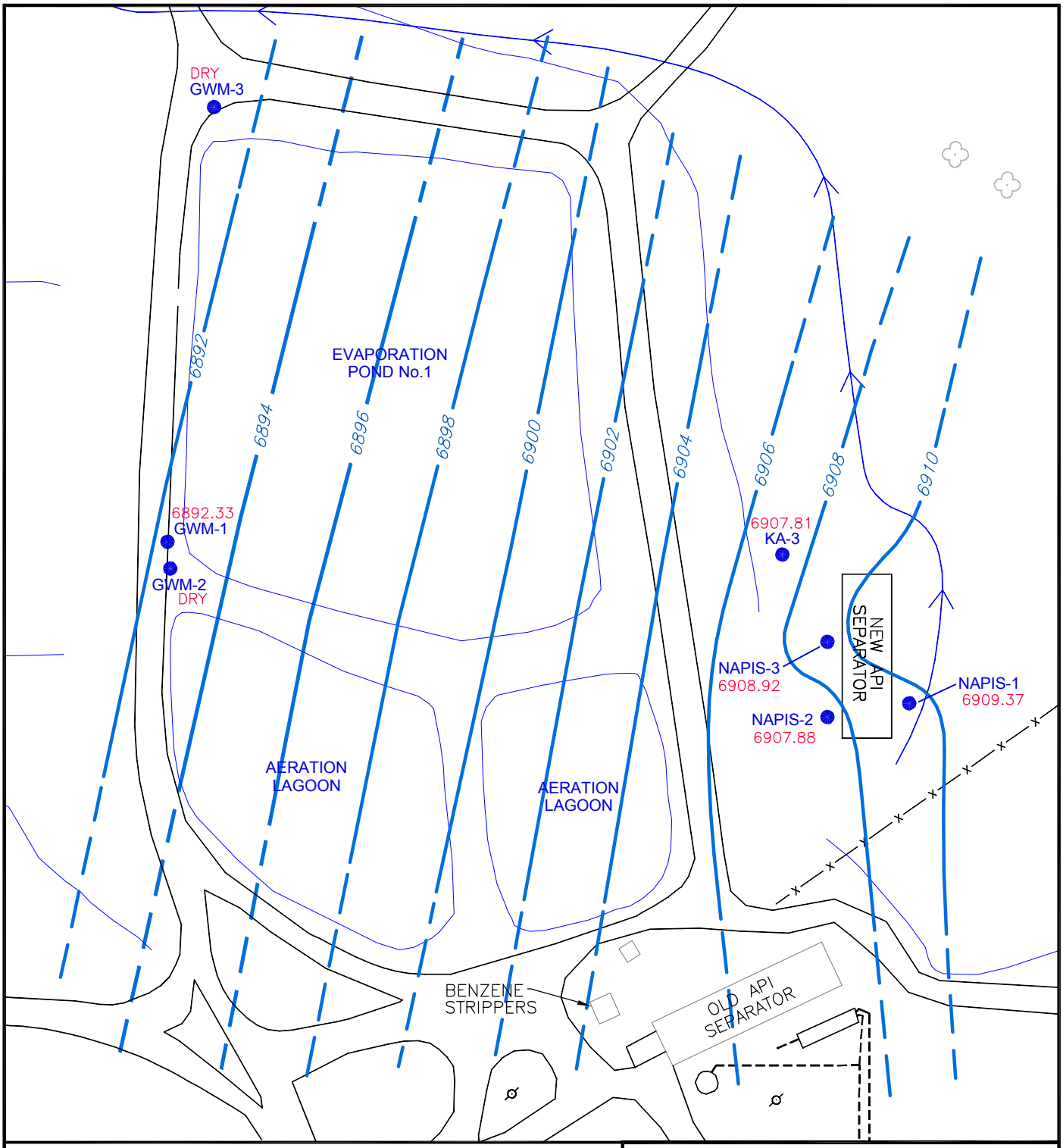

Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

GWM-1 ●	MONITORING WELL LOCATION
6894	POTENTIOMETRIC SURFACE CONTOUR (ABOVE MSL)
6907.81	POTENTIOMETRIC SURFACE (MEASURED AUGUST 2009, ABOVE MSL)
- - - - - - - -	PIPELINE

N

0 80
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining	DATE: 09/23/10	FILE: WestRef-A40

FIGURE 11
POTENTIOMETRIC SURFACE MAP
GALLUP REFINERY

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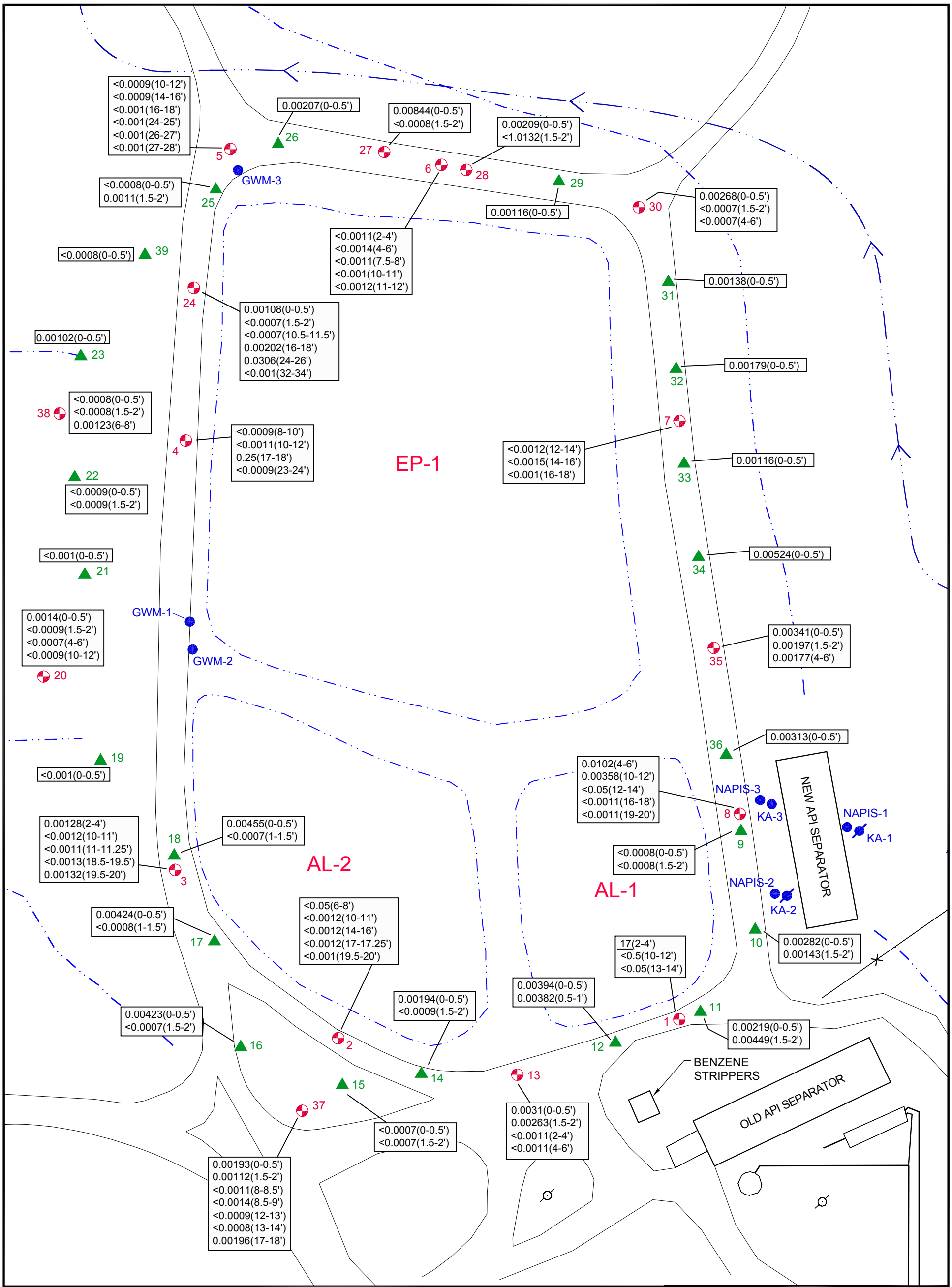

LEGEND

	PERIMETER SOIL BORING LOCATION
	HAND AUGER SAMPLE LOCATION
GWM-1	GROUNDWATER WELL LOCATION
KA-1	PLUGGED & ABANDONED MONITOR WELL LOCATION
0.0031(0-0.5')	1,2,4- TRIMETHYLBENZENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
9.68	UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining | DATE:01/24/13 | FILE:WestRef-B155

FIGURE 12
1,2,4- TRIMETHYLBENZENE
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY

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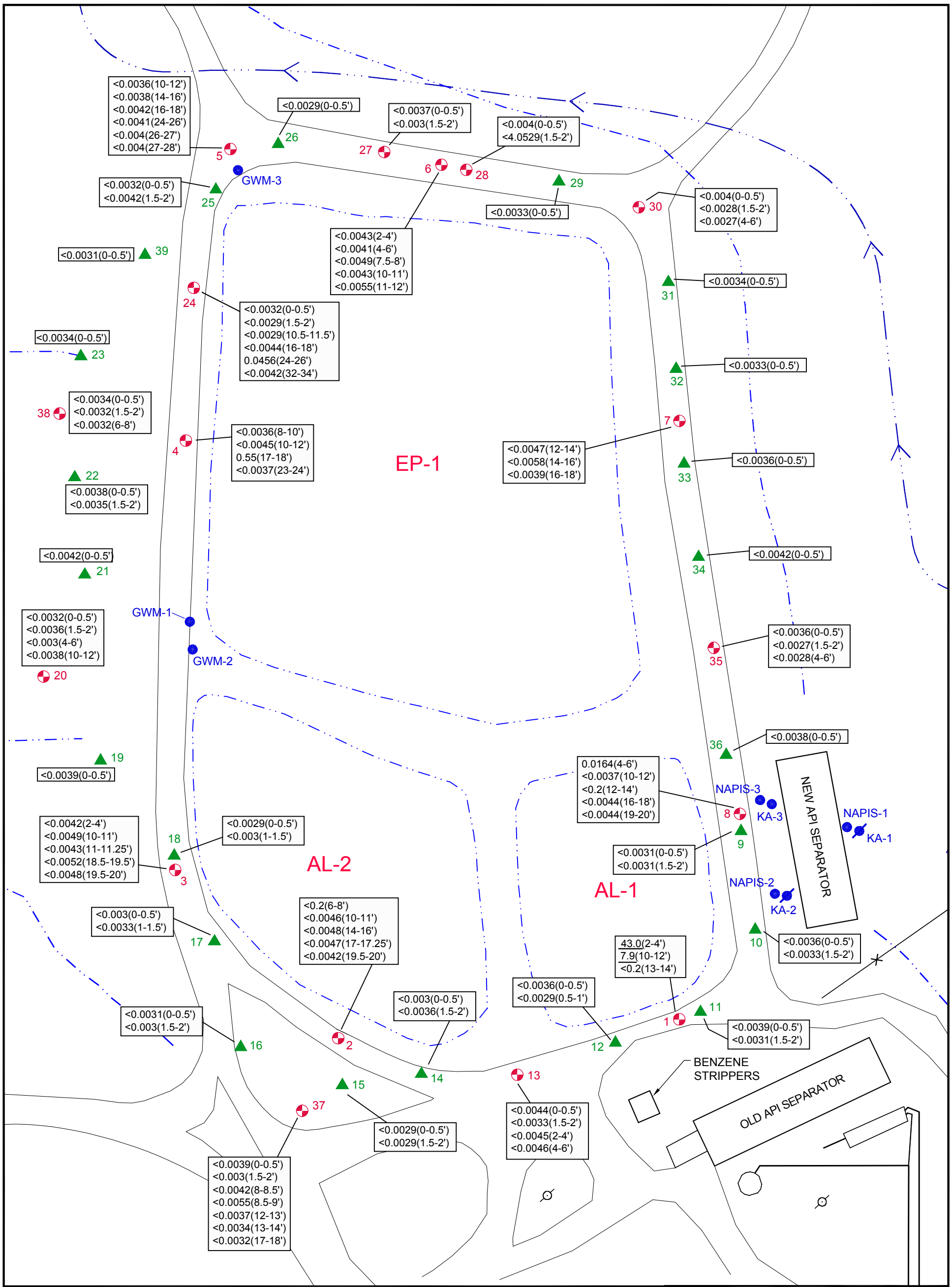

LEGEND

	PERIMETER SOIL BORING LOCATION
	HAND AUGER SAMPLE LOCATION
GWM-1	GROUNDWATER WELL LOCATION
KA-1	PLUGGED & ABANDONED MONITOR WELL LOCATION
<0.0044(0-0.5')	1-METHYLNAPHTHALENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
2.35	UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining | DATE:01/24/13 | FILE:WestRef-B157

FIGURE 13
1-METHYLNAPHTHALENE
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY

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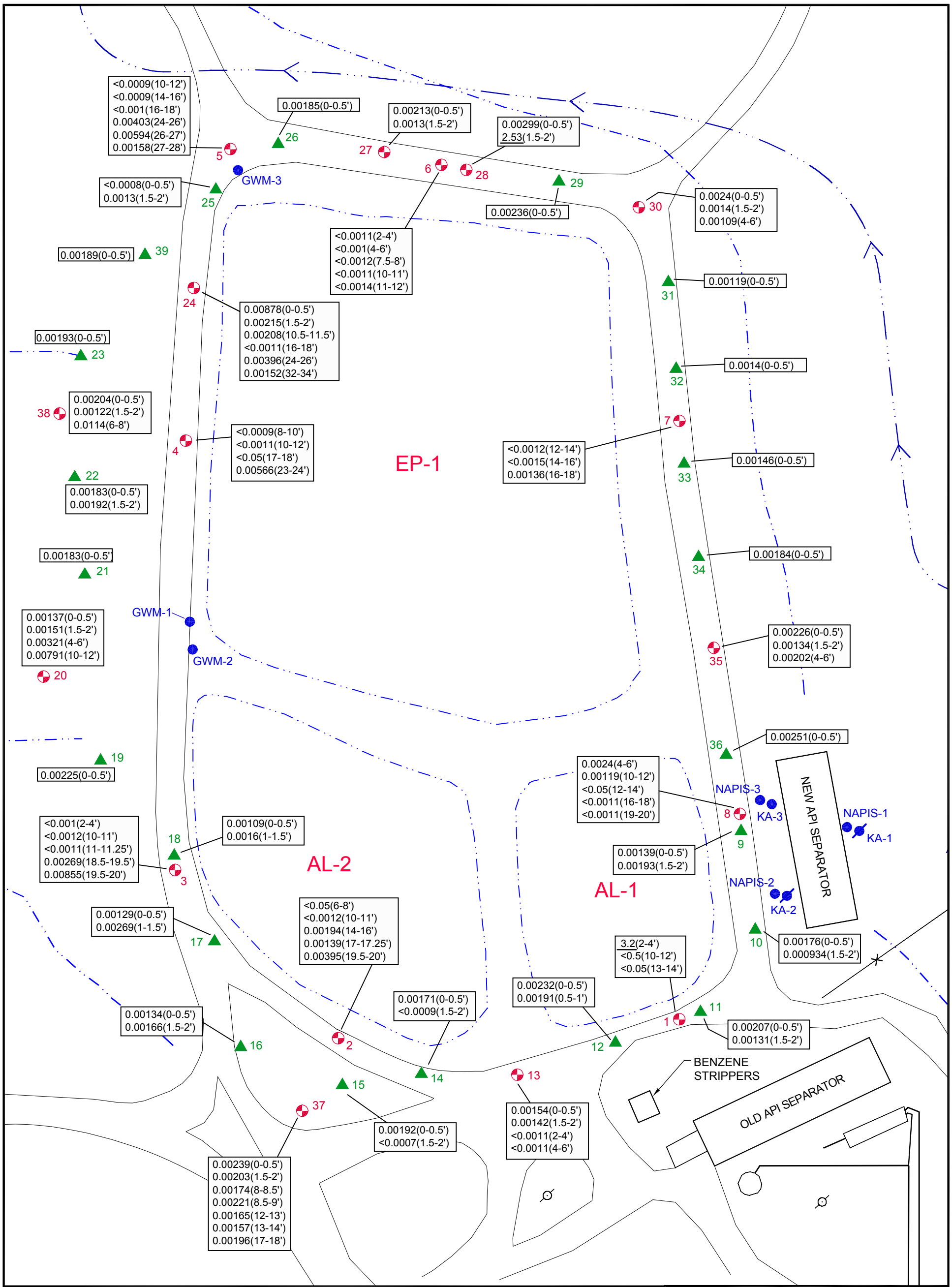

LEGEND

	PERIMETER SOIL BORING LOCATION
	HAND AUGER SAMPLE LOCATION
GWM-1	GROUNDWATER WELL LOCATION
KA-1	PLUGGED & ABANDONED MONITOR WELL LOCATION
0.00154(0-0.5')	BENZENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
0.796	UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

0 50
SCALE IN FEET

Western Refining
GALLUP REFINERY

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FIGURE 14
BENZENE
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY

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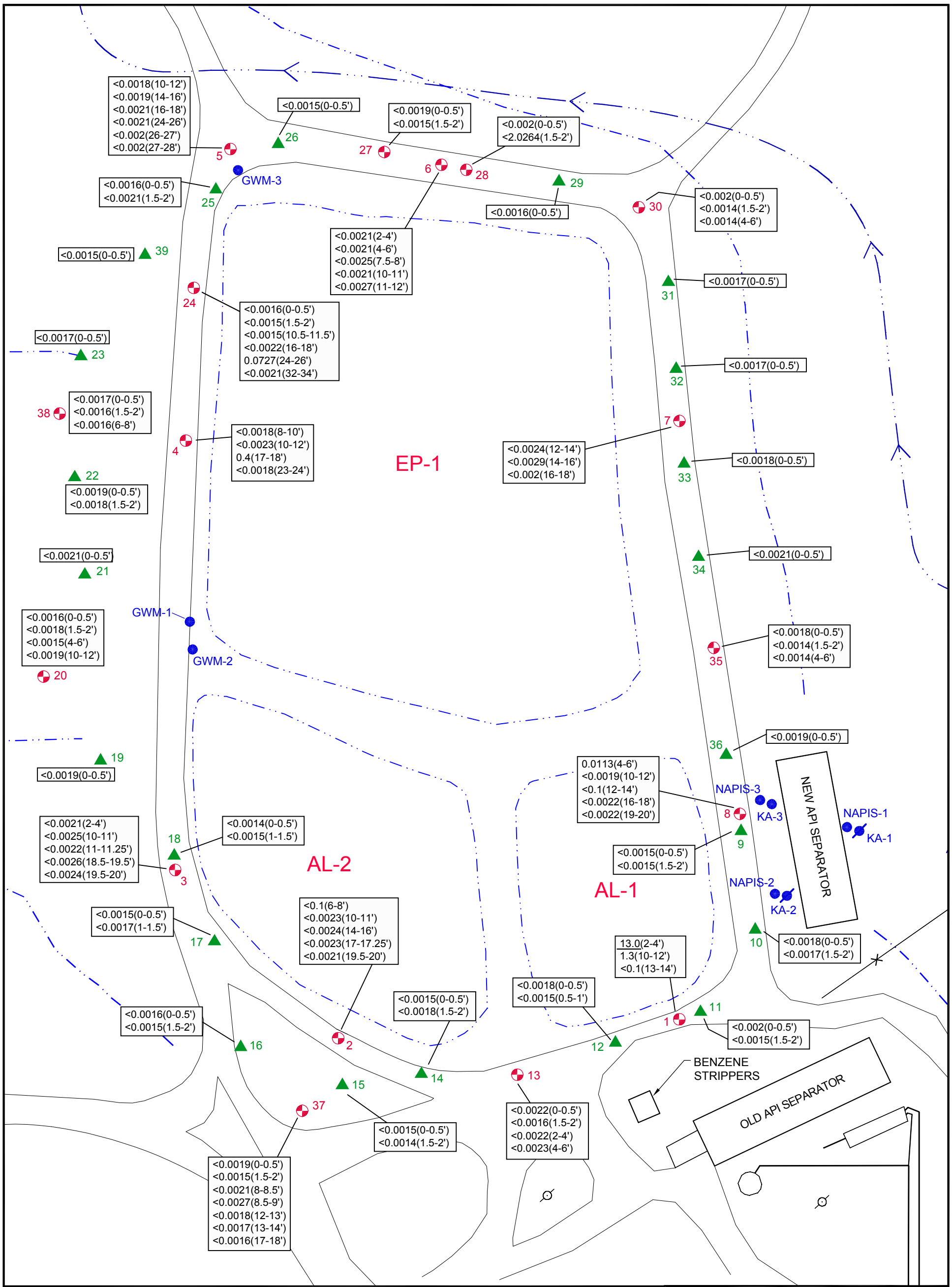

LEGEND

	PERIMETER SOIL BORING LOCATION
	HAND AUGER SAMPLE LOCATION
GWM-1	GROUNDWATER WELL LOCATION
KA-1	PLUGGED & ABANDONED MONITOR WELL LOCATION
<0.0022(0-0.5')	NAPHTHALENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
1.64	UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining | DATE:01/24/13 | FILE:WestRef-B158

FIGURE 15
NAPHTHALENE
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY

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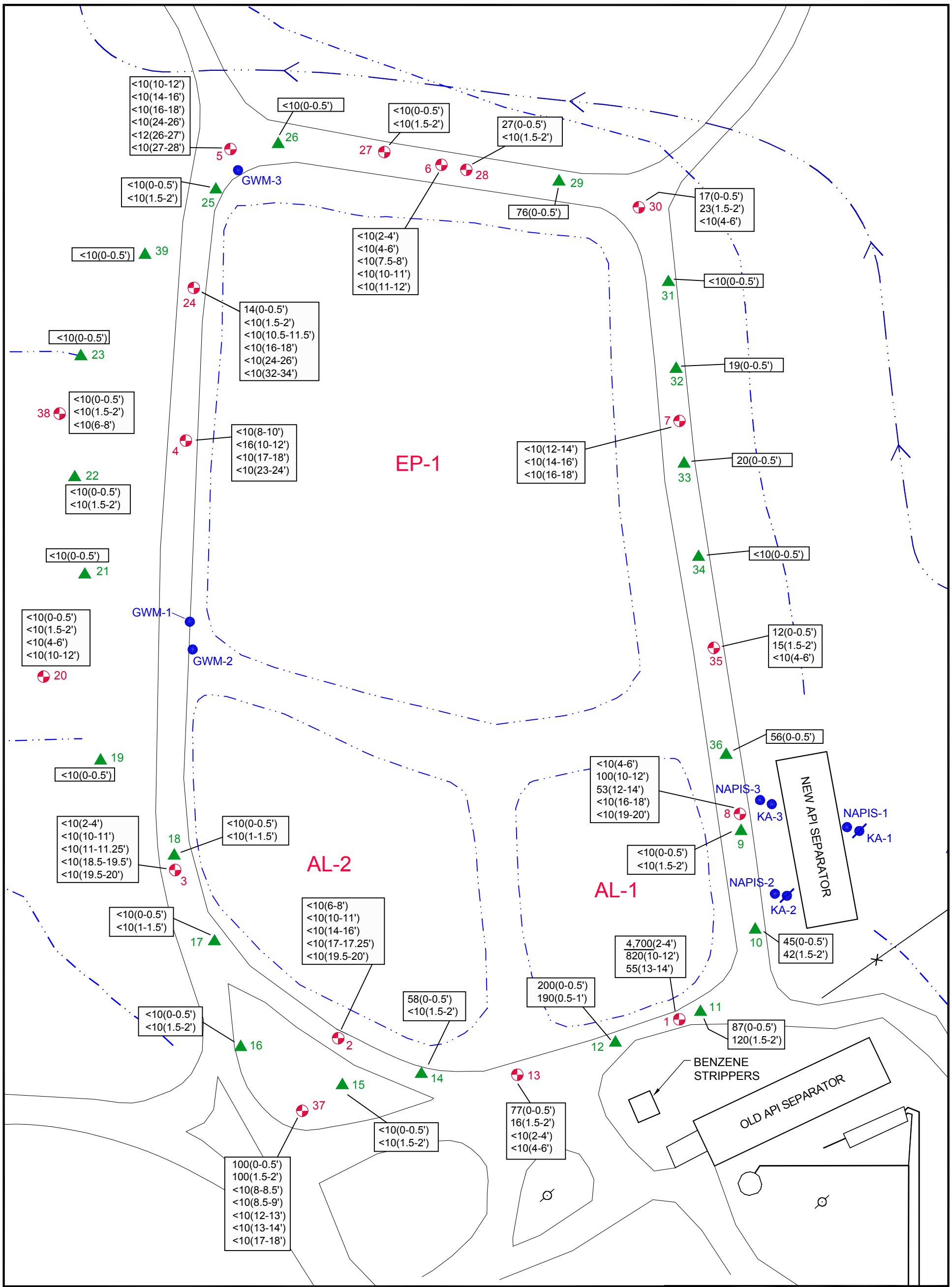

LEGEND

- PERIMETER SOIL BORING LOCATION
- HAND AUGER SAMPLE LOCATION
- GWM-1 GROUNDWATER WELL LOCATION
- KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
- 77(0-0.5') DIESEL RANGE ORGANICS CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 1,000 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

0 50
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/24/13	FILE:WestRef-B159

FIGURE 16
DIESEL RANGE ORGANICS
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY

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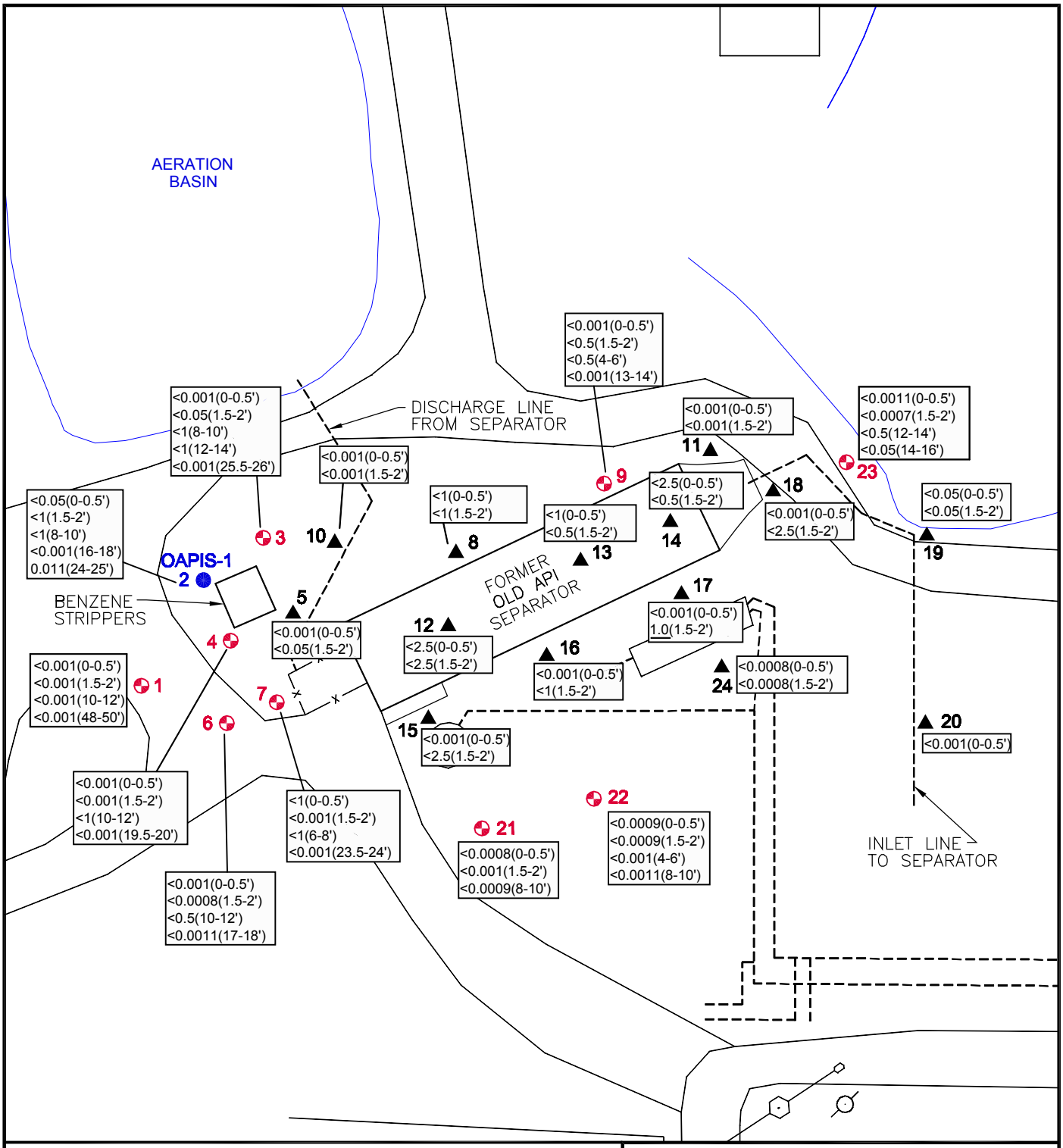

Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

N

0 40
SCALE IN FEET

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- <0.001(0-0.5') 1,1,2-TRICHLOROETHANE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 0.0514 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/31/13	FILE:WestRef-A164

FIGURE 17
1,1,2-TRICHLOROETHANE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

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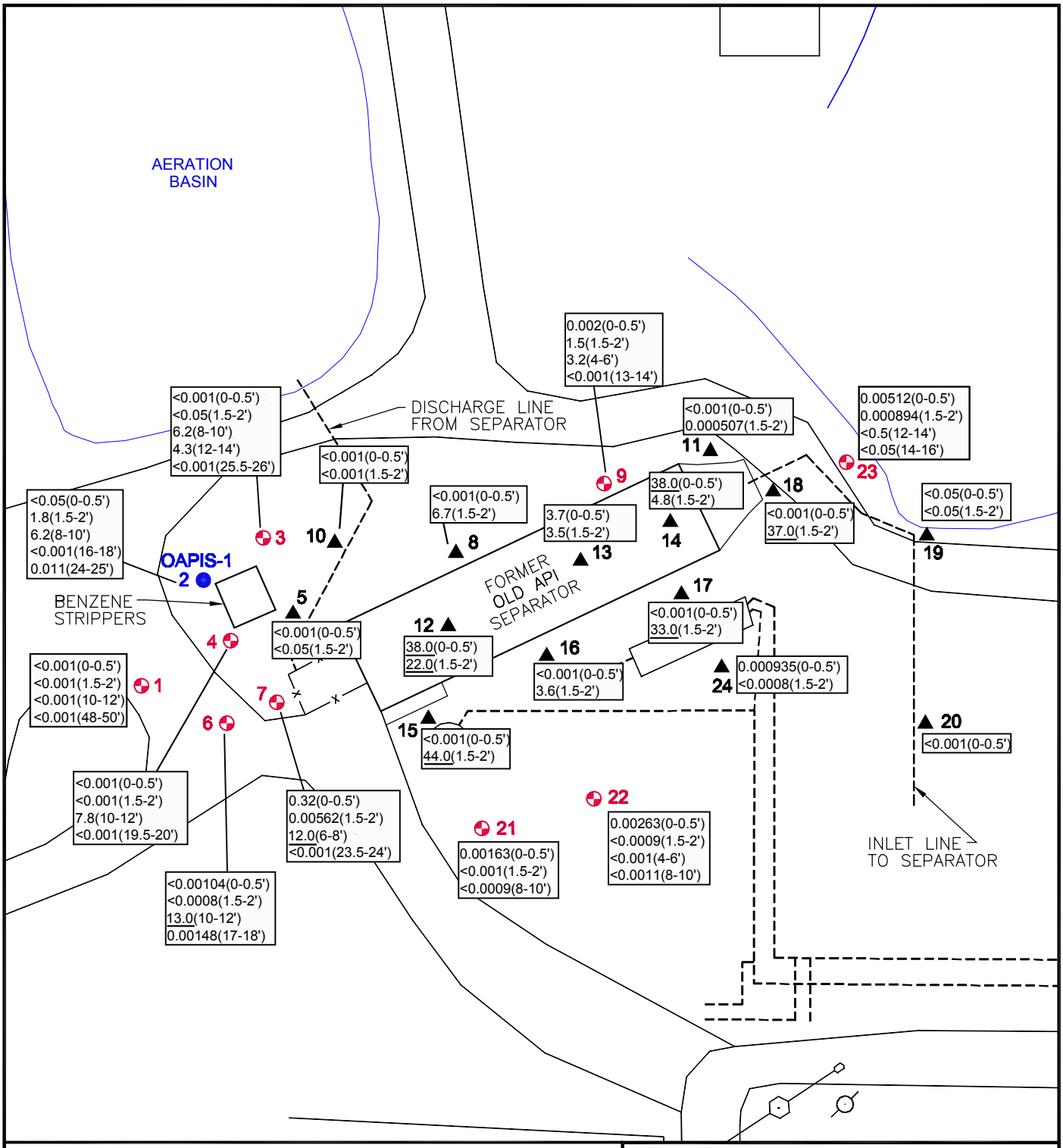

Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

N

0 40
SCALE IN FEET

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- 0.00163(0-0.5') 1,2,4-TRIMETHYLBENZENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 9.68 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A154

FIGURE 18
1,2,4-TRIMETHYLBENZENE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

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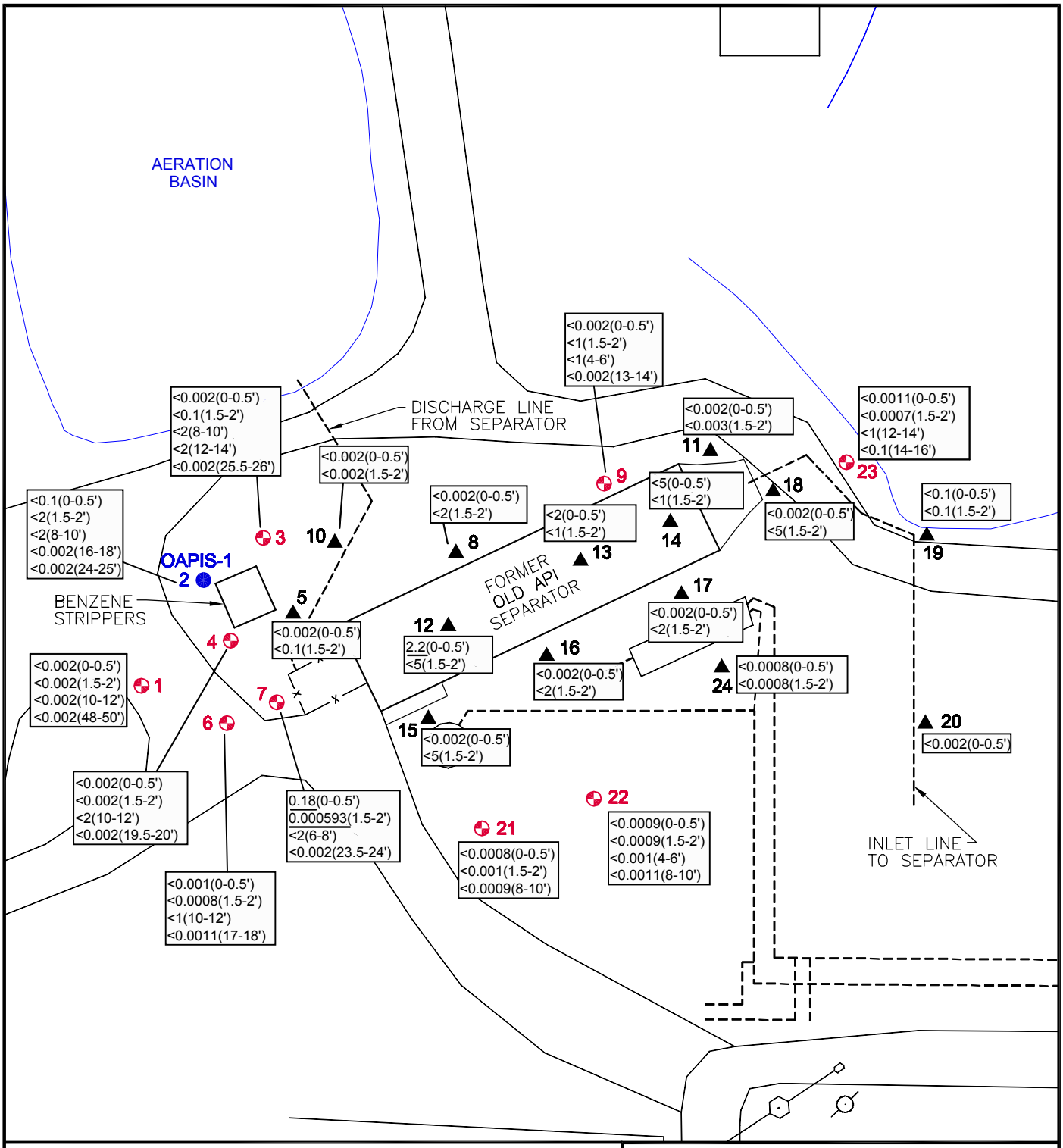

Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- <0.001(0-0.5') — 1,2-DIBROMO-3-CHLOROPROPANE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 0.000507 — UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

N

0 40
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/31/13	FILE:WestRef-A165

FIGURE 19
1,2-DIBROMO-3-CHLOROPROPANE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

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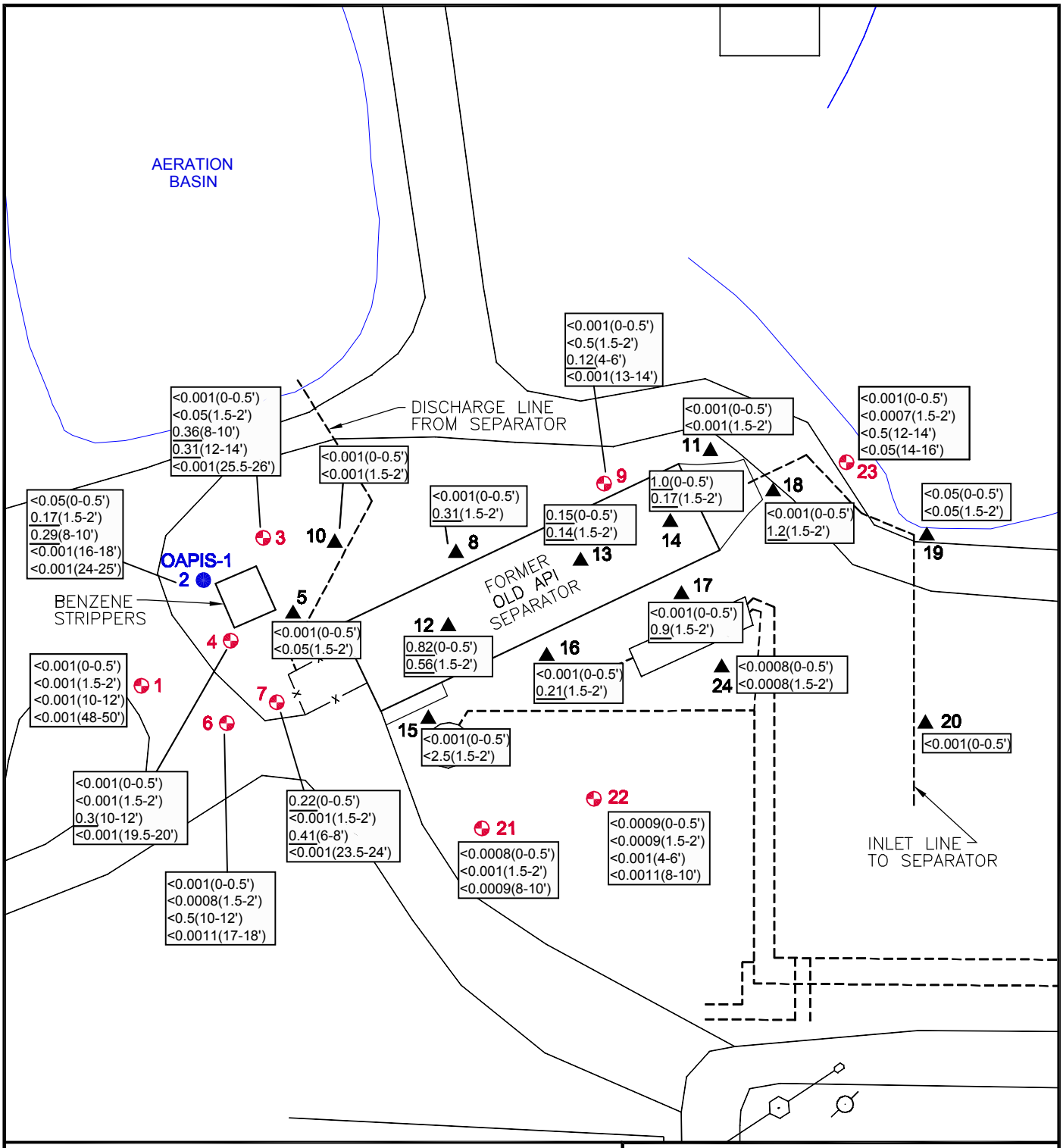

Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

N

0 40
SCALE IN FEET

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- <0.0008(0-0.5') — 1,2-DIBROMOETHANE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 0.0071 — UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A155

FIGURE 20
1,2-DIBROMOETHANE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

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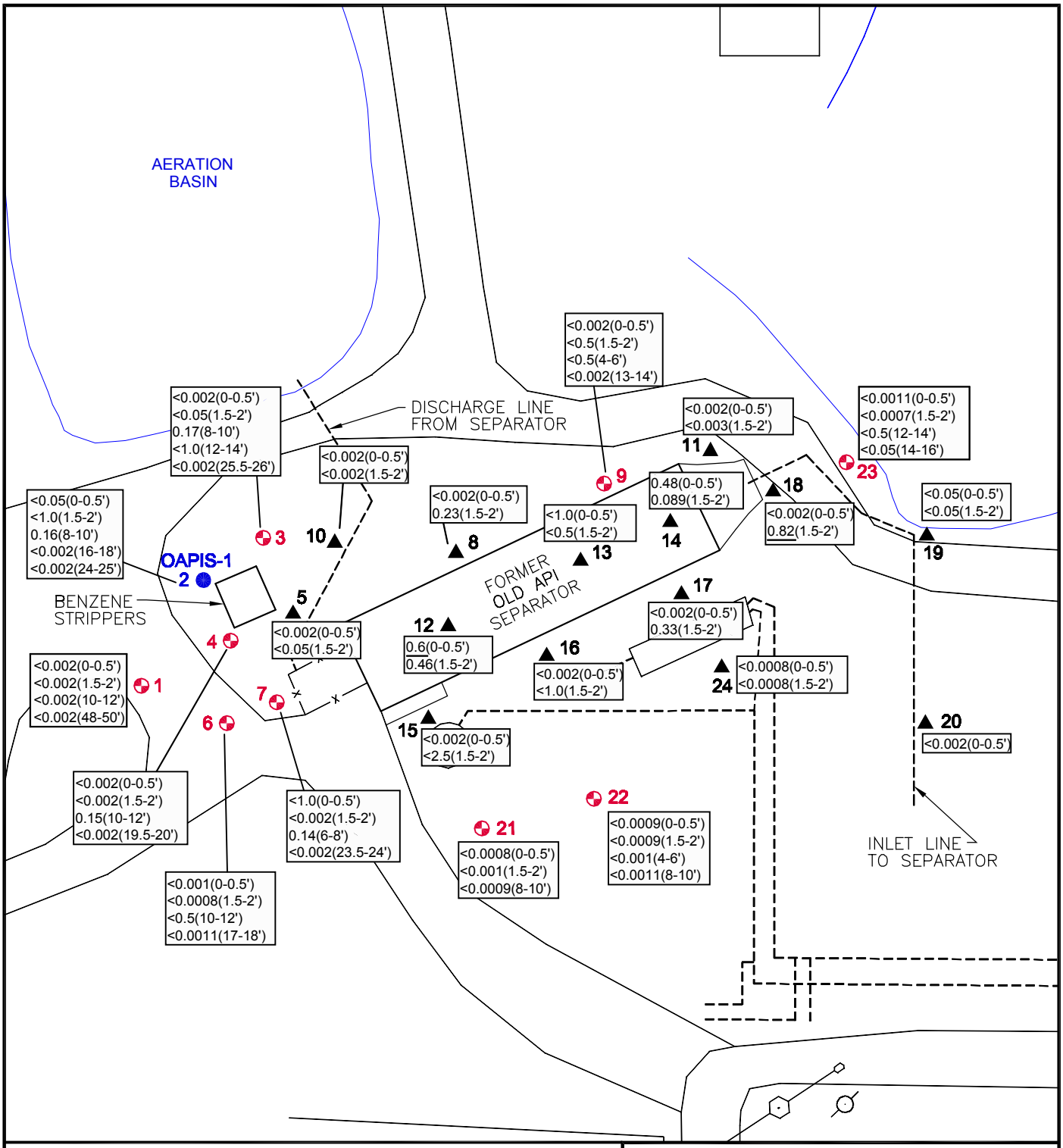

Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

N

0 40
SCALE IN FEET

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- <0.0008(0-0.5') — 1,2-DICHLOROPROPANE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 0.494 — UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A156

FIGURE 21
1,2-DICHLOROPROPANE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

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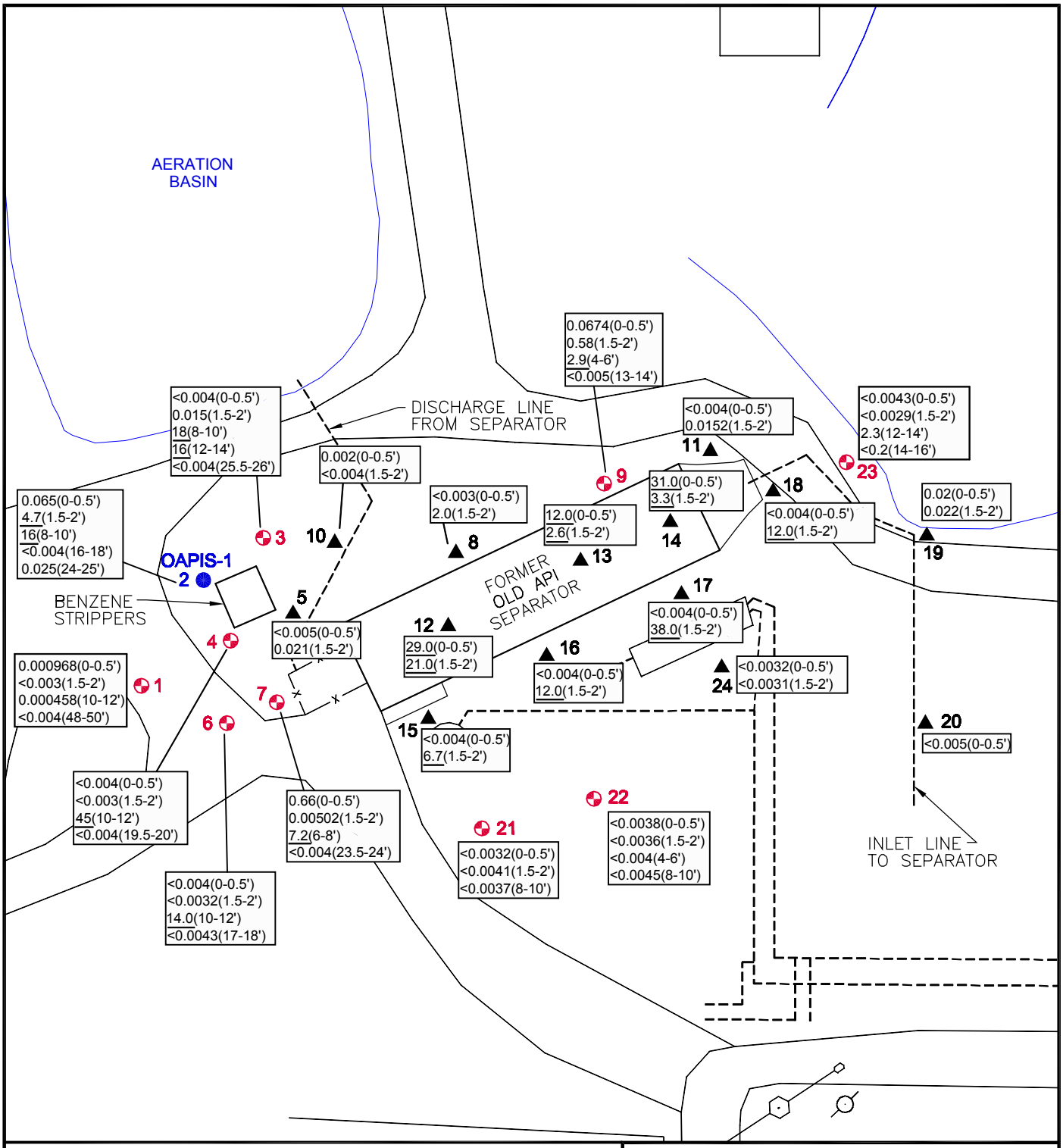

Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

N

0 40
SCALE IN FEET

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- <0.0038(0-0.5') — 1-METHYLNAPHTHALENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 2.35 — UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A160

FIGURE 22
1-METHYLNAPHTHALENE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

RPS
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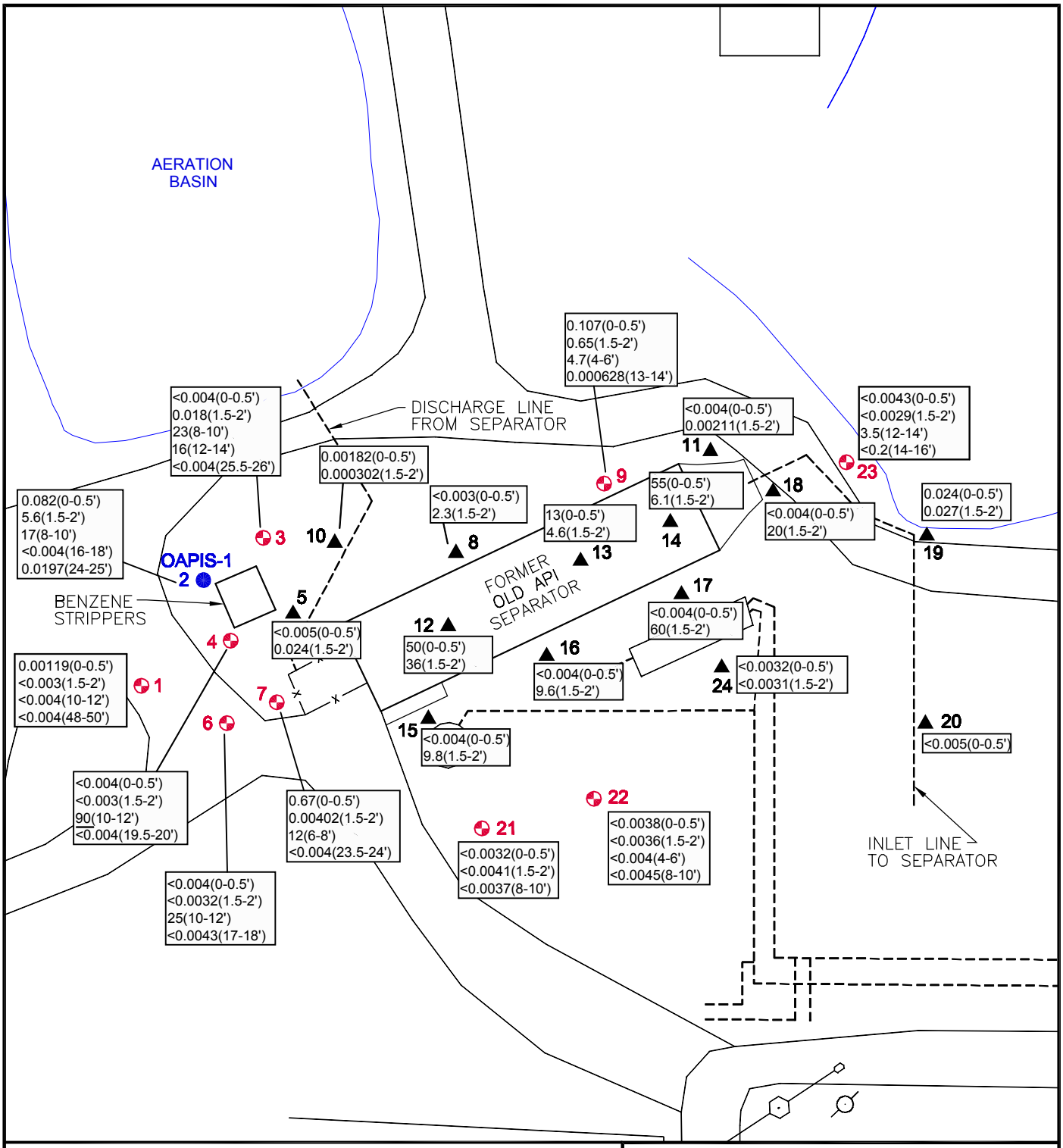
TBPE No. 1298



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

N

0 40
SCALE IN FEET

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- 0.00119(0-0.5') 2-METHYLNAPHTHALENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 64.5 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE: WestRef-A161

FIGURE 23
2-METHYLNAPHTHALENE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

RPS
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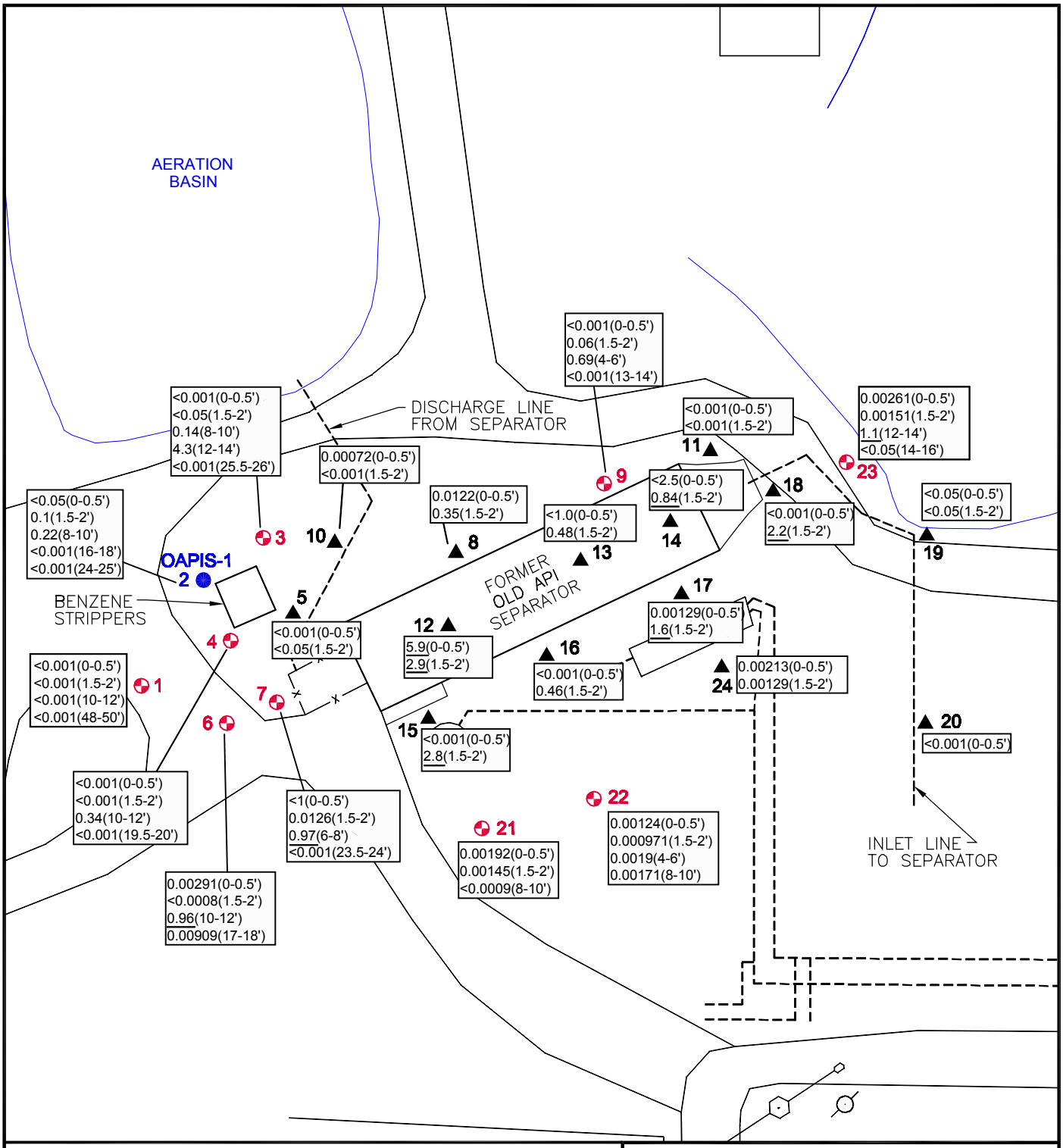
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- 0.00124(0-0.5') BENZENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 0.796 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

N

0 40
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A157

FIGURE 24
BENZENE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

RPS
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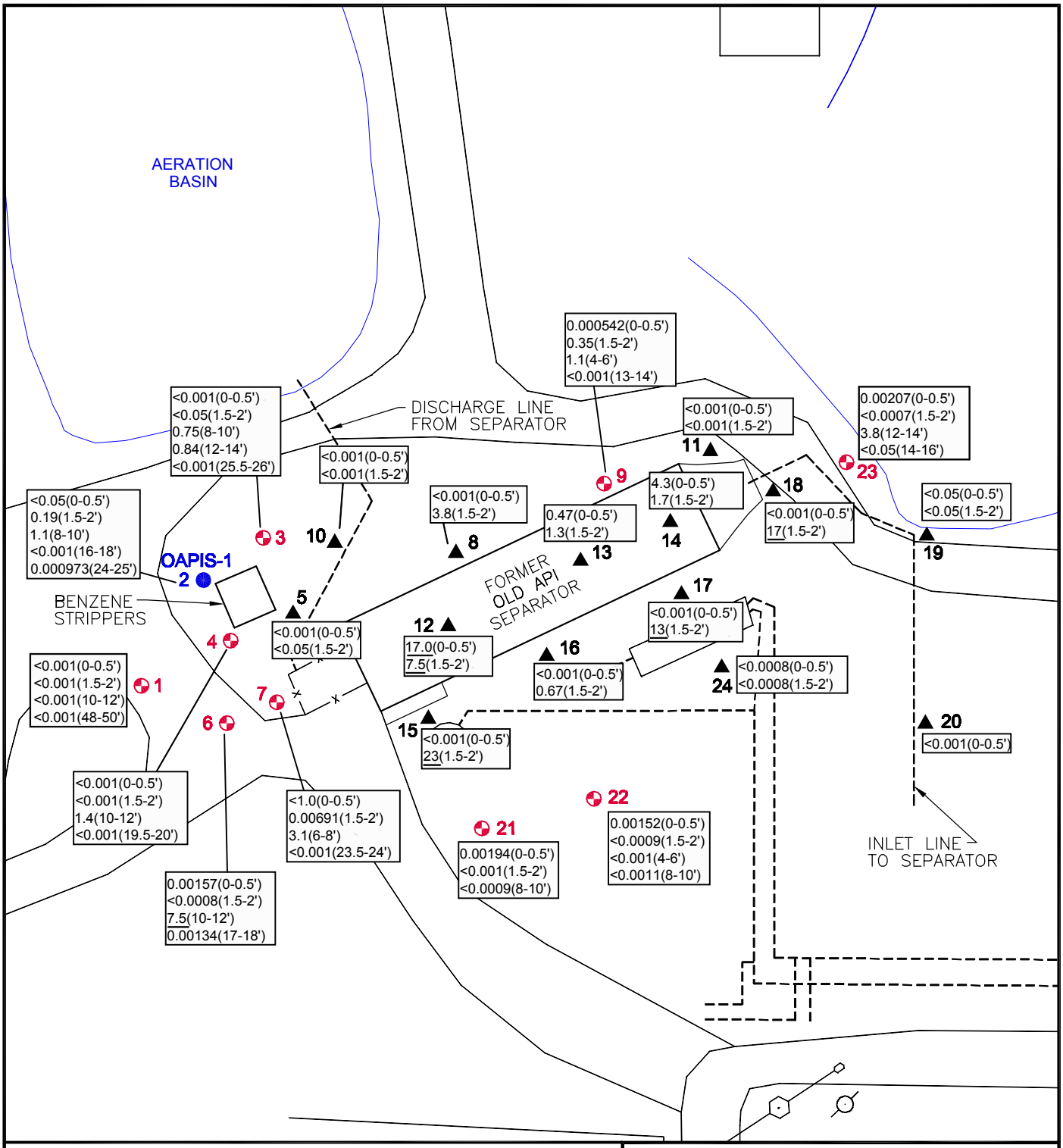
TBPE No. 1298



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

N

0 40
SCALE IN FEET

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- 0.00152(0-0.5') ETHYLBENZENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 5.98 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A158

FIGURE 25
ETHYLBENZENE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

RPS
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Building 3, Suite 200
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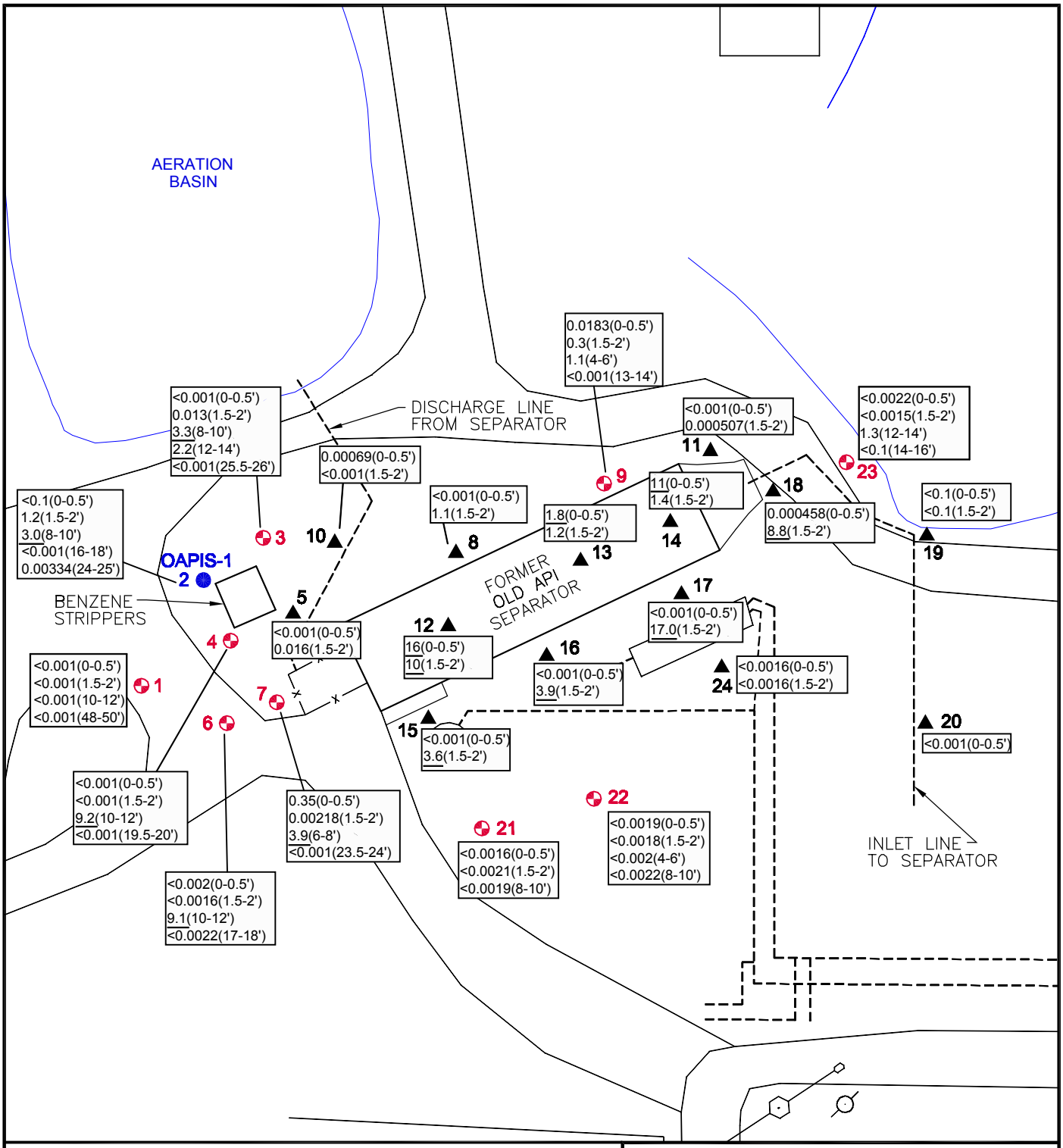
TBPE No. 1298



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- <0.0019(0-0.5') — NAPHTHALENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 1.64 — UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

N

0 40
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A159

FIGURE 26
NAPHTHALENE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

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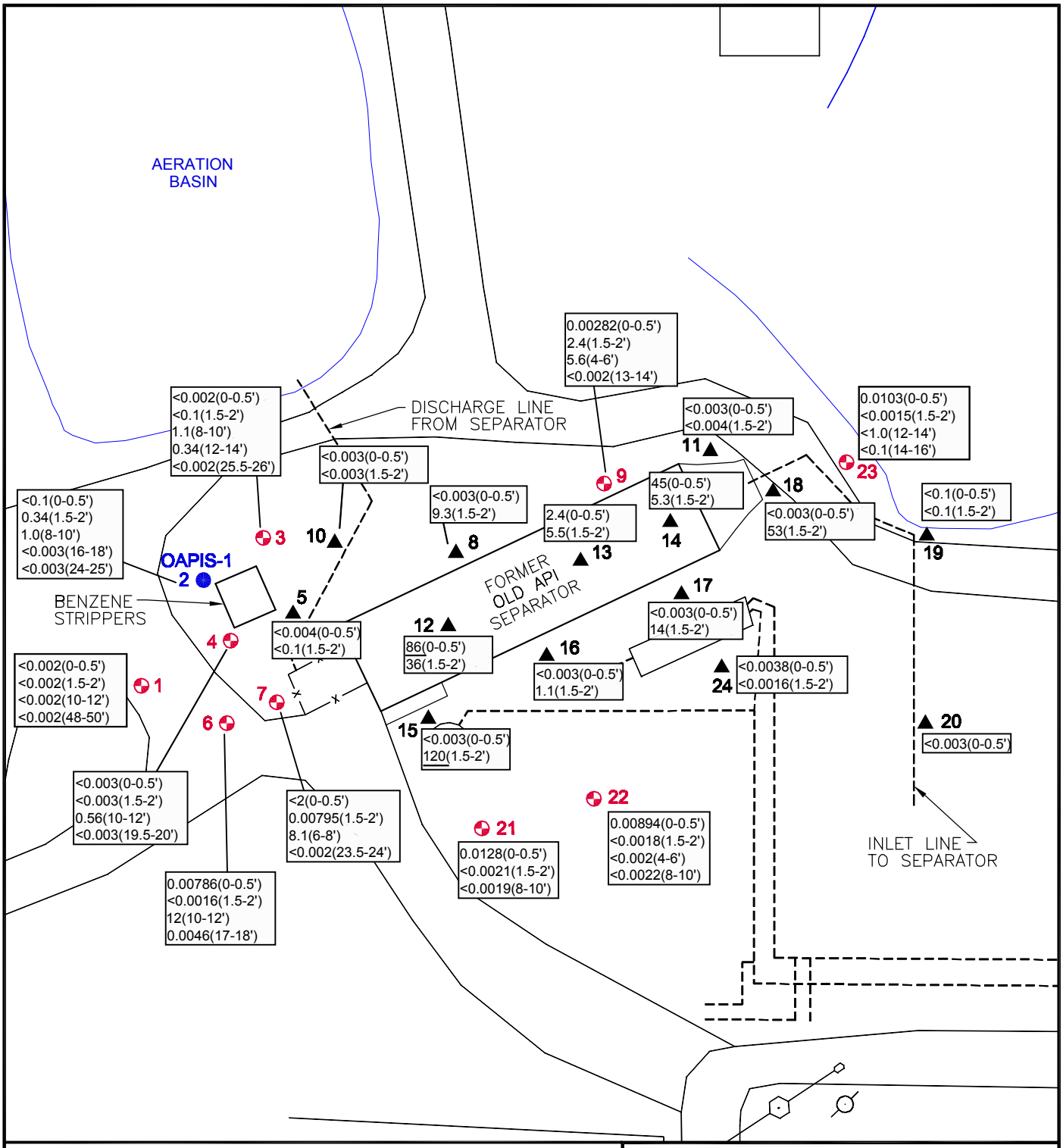
TBPE No. 1298



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- 0.0128(0-0.5') XYLENES CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 72.1 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A162

FIGURE 27
XYLENES
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

RPS
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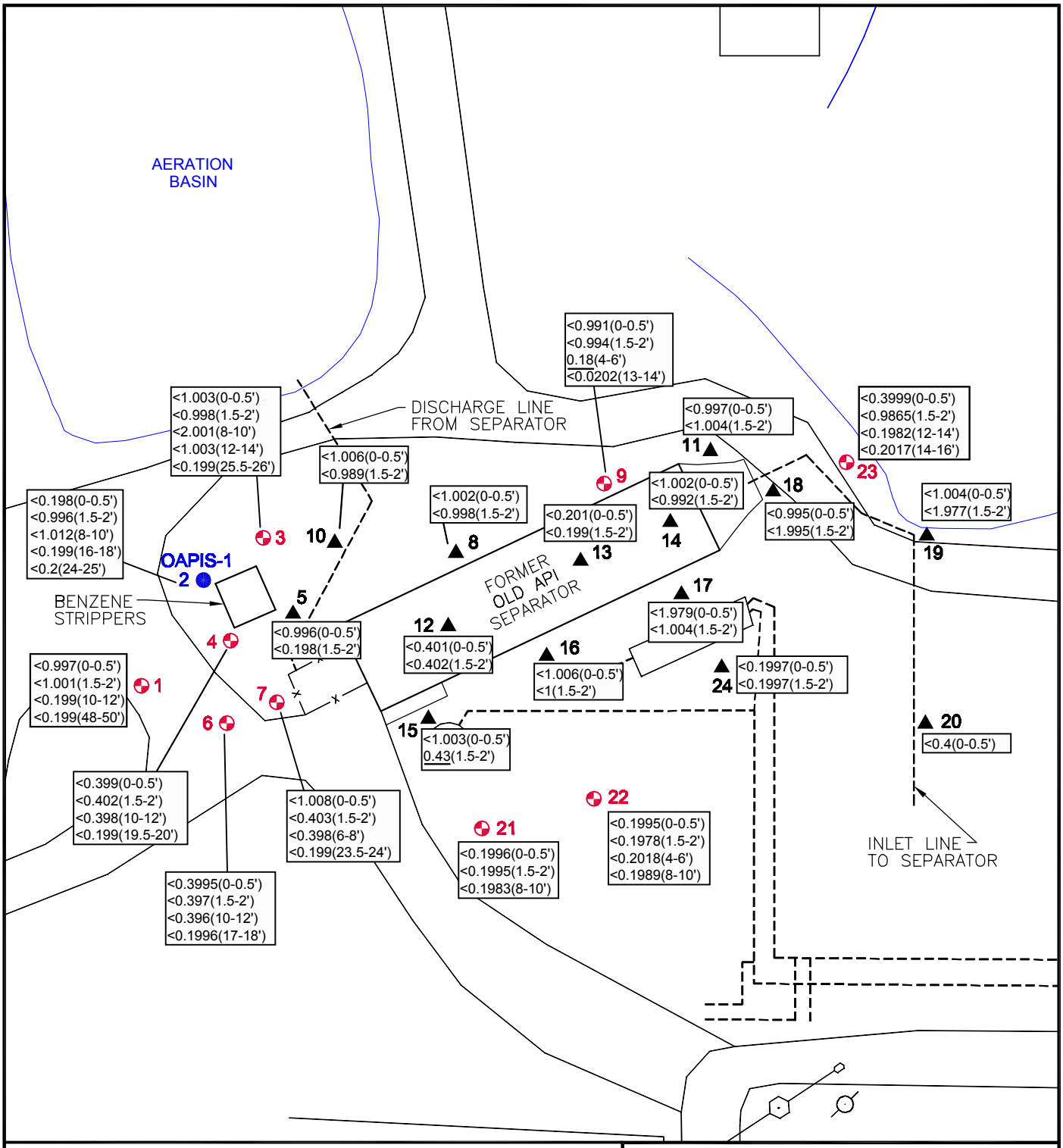
Austin, Texas 78746
TBPE No. 1298



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- <1.003(0-0.5') BIS(2-CHLOROETHYL)ETHER CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 0.0121 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

N

0 40
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/31/13	FILE:WestRef-A166

FIGURE 28
BIS(2-CHLOROETHYL)ETHER
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

RPS
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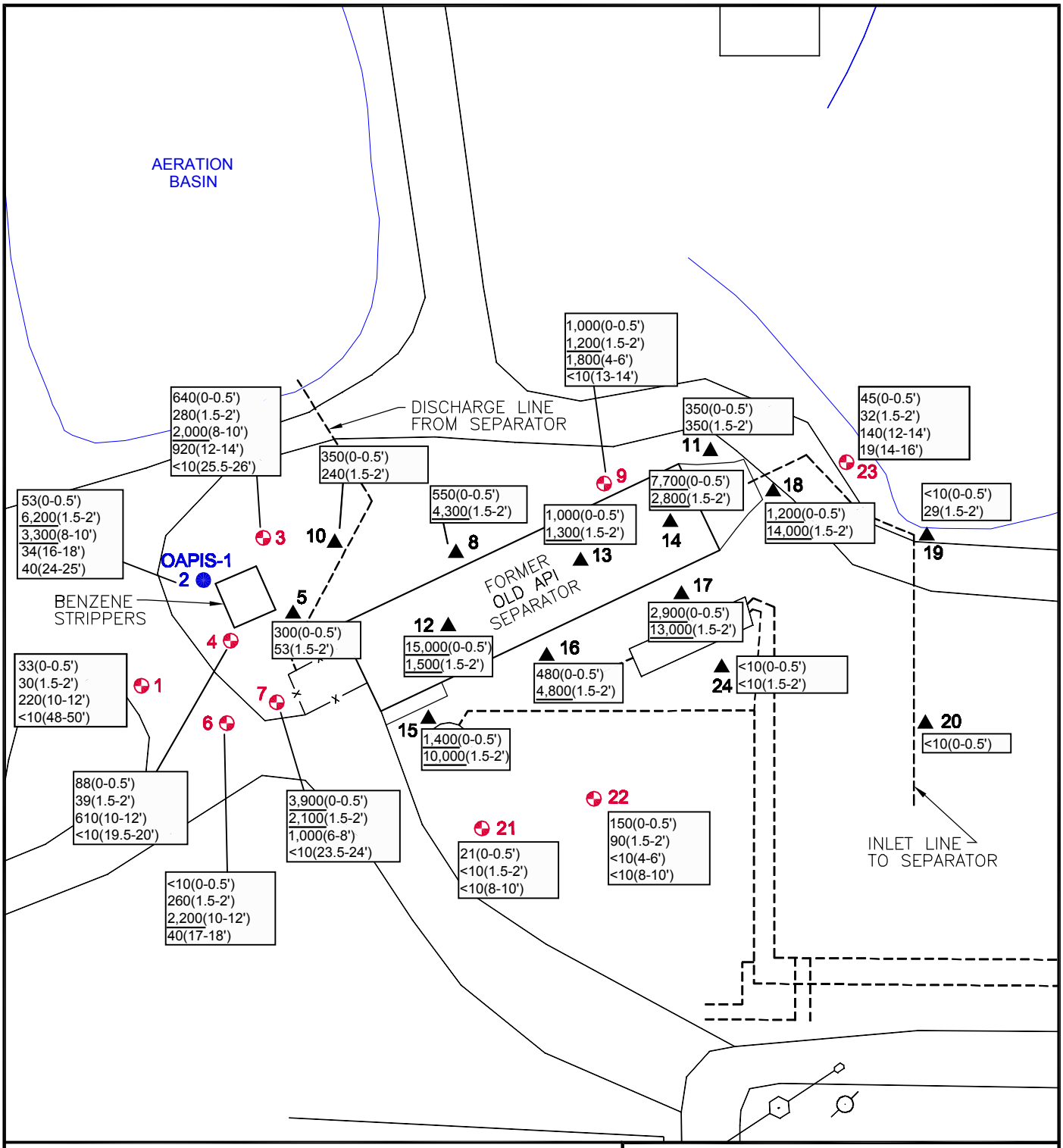
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HAND AUGER LOCATION
- PIPELINE
- 21(0-0.5') DIESEL RANGE ORGANICS CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 1,000 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

N

0 40
SCALE IN FEET

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:01/29/13	FILE:WestRef-A163

FIGURE 29
DIESEL RANGE ORGANICS
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY

RPS
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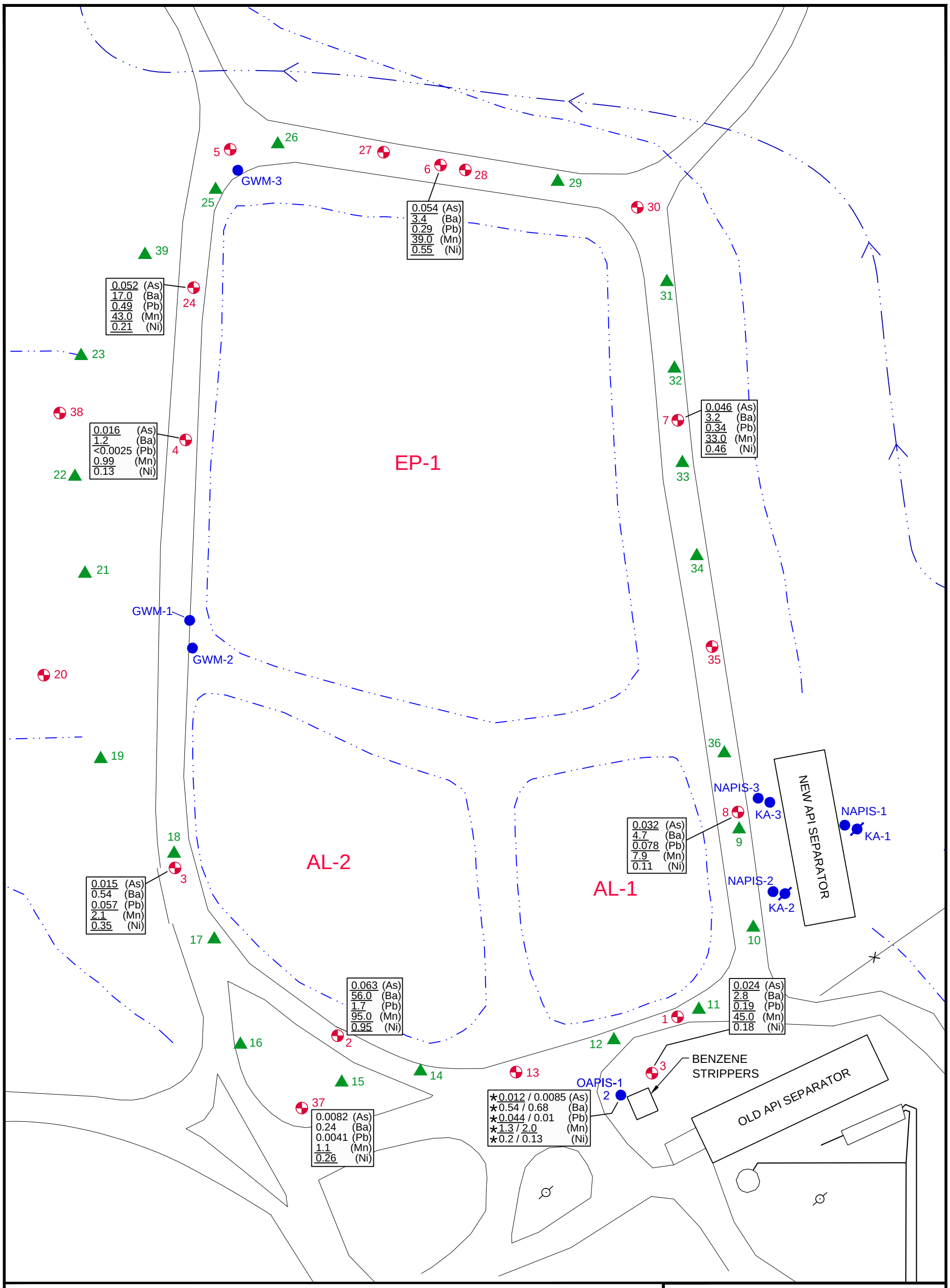
Austin, Texas 78746
TBPE No. 1298



NOTE: CONSTITUENT SCREENING LEVEL UNITS - mg/l

LEGEND

- PERIMETER SOIL BORING LOCATION / TEMPORARY MONITORING WELL
- HAND AUGER SAMPLE LOCATION
- GWM-1 GROUNDWATER WELL LOCATION
- KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
- 0.01 ARSENIC SCREENING LEVEL, mg/l (As)
- 1.0 BARIUM SCREENING LEVEL, mg/l (Ba)
- 0.015 LEAD SCREENING LEVEL, mg/l (Pb)
- 0.2 MANGANESE SCREENING LEVEL, mg/l (Mn)
- 0.2 NICKEL SCREENING LEVEL, mg/l (Ni)
- 0.21 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL
- * JULY 2012 SAMPLE RESULTS

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining | DATE:05/06/14 | FILE:WestRef-B154

FIGURE 30
SWMU No. 1 & No. 14 - METALS
OCTOBER 2012 GROUNDWATER RESULTS
GALLUP REFINERY

RPS
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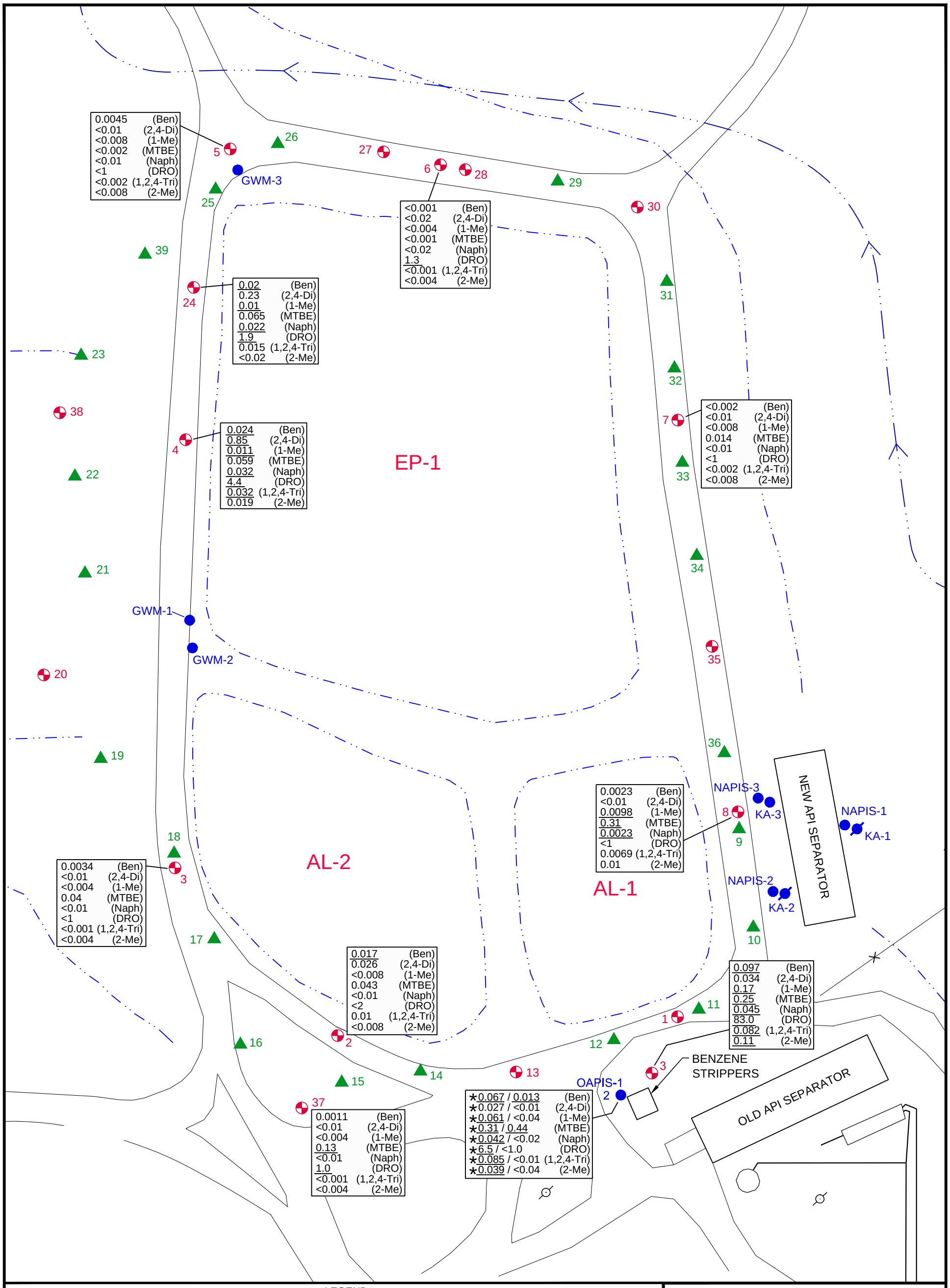
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298



NOTE: CONSTITUENT SCREENING LEVEL UNITS - mg/l

LEGEND

- PERIMETER SOIL BORING LOCATION / TEMPORARY MONITORING WELL
- HAND AUGER SAMPLE LOCATION
- GWM-1 GROUNDWATER WELL LOCATION
- KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION

0.005	BENZENE SCREENING LEVEL, mg/l (Ben)
0.73	2,4-DIMETHYLPHENOL SCREENING LEVEL, mg/l (2,4-Di)
0.0097	1-METHYLNAPHTHALENE SCREENING LEVEL, mg/l (1-Me)
0.125	MTBE SCREENING LEVEL, mg/l (MTBE)
0.0014	NAPHTHALENE SCREENING LEVEL, mg/l (Naph)
0.2	DRO SCREENING LEVEL, mg/l (DRO)
0.015	1,2,4-TRIMETHYLBENZENE SCREENING LEVEL, mg/l (1,2,4-Tri)
0.027	2-METHYLNAPHTHALENE SCREENING LEVEL, mg/l (2-Me)
1.56	UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL
*	JULY 2012 SAMPLE RESULTS

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining | DATE:05/06/14 | FILE:WestRef-B153

FIGURE 31
SWMU No. 1 & No. 14 - ORGANICS
OCTOBER 2012 GROUNDWATER RESULTS
GALLUP REFINERY

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Austin, Texas 78746
TBPE No. 1298

Appendix A

Trihydro Report, June 2008

AERATION LAGOONS 1 AND 2 AND
EVAPORATION POND 1 - SEDIMENT INVESTIGATION
WESTERN REFINING COMPANY
GALLUP REFINERY
GALLUP, NEW MEXICO

June 2, 2008

Project #: 697-019-001

PREPARED BY: Trihydro Corporation

1252 Commerce Drive, Laramie, WY 82070

Executive Summary

In January of 2008, the Western Refining Company's Gallup Refinery (Gallup) requested the assistance of Trihydro Corporation (Trihydro) to characterize the accumulated sediment in Aeration Lagoons 1 and 2 and Evaporation Pond 1. Gallup also requested that Trihydro collect sediment thickness measurement at various locations and calculate the approximate volume of sediment in the above mentioned aeration lagoons and pond.

A Sediment Sampling Work Plan (Plan) was prepared to assist in the field activities and was submitted to Western Refining Company and the New Mexico Department of Environmental Quality (NMED) on March 28, 2008. After reviewing the Plan, NMED recommended collecting discrete-depth grab samples instead of composite samples as proposed in the Plan. Gallup Refinery agreed with this recommendation and discrete-depth grab samples were collected from various sediment depths in each body of water.

Field work to implement the plan was conducted from April 7 to April 11, 2008. Field work consisted of:

- Collecting two sediment samples at five locations in each aeration lagoon.
- Measuring sediment thicknesses at each aeration lagoon sample location as well as five additional locations in each lagoon to assist in sediment volume calculations.
- Collecting one sediment sample at eight locations in Evaporation Pond 1.
- Measuring sediment thicknesses at each evaporation pond sample location as well as eight additional locations to assist in sediment volume calculations.

The sediment samples were analyzed for diesel range organics (DRO)/gasoline range organics (GRO) by USEPA method 8015, semi-volatile organic compounds (SVOCs) by USEPA method 8270, volatile organic compounds (VOCs) by USEPA method 8260, RCRA metals by USEPA method 6010C, and mercury by USEPA Method 7471. Results of the laboratory analysis are discussed in Section 6.

Table of Contents

1.0 INTRODUCTION 1-1

2.0 RECONNAISSANCE FIELD EVENT 2-1

3.0 DEVIATIONS FROM APPROVED PLAN 3-1

4.0 FIELD INVESTIGATION 4-1

4.1 Site Conditions 4-1
4.2 Sediment Investigation Methodology 4-1
4.2.1 Sample and Sediment Measurement Locations 4-1
4.2.2 Sediment Measurements 4-1
4.2.3 Sediment Sampling 4-2
4.2.3.1 Sampling Methods and Procedures – Aeration Lagoons 4-2
4.2.3.2 Sampling Methods and Procedures – Evaporation Pond 1 4-3
4.2.4 Equipment Decontamination Procedures 4-4
4.2.5 Field Documentation and Logging 4-4
4.3 Sediment Characteristics 4-4
4.3.1 Sediment Characteristics – Aeration Lagoons 1 and 2 4-4
4.3.2 Sediment Characteristics – Evaporation Pond 1 4-5
4.4 Investigation Derived Waste 4-5

5.0 REGULATORY CRITERIA 5-1

6.0 ANALYTICAL RESULTS 6-1

6.1 Total Petroleum Hydrocarbons (TPH) 6-1
6.2 Metals 6-1
6.3 Semi-Volatile Organic Compounds 6-2
6.4 Volatile Organic Compounds 6-2
6.5 Quality Assurance/Quality Control Protocol 6-2

7.0 CONCLUSIONS 7-1

7.1 Sediment Volumes 7-1
7.2 Sediment Characterization 7-1

List of Tables

1. Sediment Depth and Thickness Measurements, Gallup Refinery, Western Refining Company, Gallup, New Mexico

2. Analytical Data Summary, Gallup Refinery, Western Refining Company, Gallup, New Mexico

List of Figures

1. Sediment Measurement and Sample Locations for Aeration Lagoons 1 and 2 and Evaporation Pond 1, Western Refining Company L.L.C., Gallup Refinery, Gallup, New Mexico

List of Appendices

A. INVESTIGATION PHOTOS

B. SEDIMENT SAMPLE FORMS

C. LABORATORY RESULTS

D. DATA VALIDATION REPORTS

E. SURVCAD VOLUME CALCULATIONS

1.0 INTRODUCTION

Aeration Lagoon 1, Aeration Lagoon 2, and Evaporation Pond 1 are currently used as part of Gallup's process water treatment system. Both lagoons and the evaporation pond are located in an area west/northwest from the refinery that is approximately 280 feet by 440 feet in size. Gallup is considering taking the two lagoons and Evaporation Pond 1 out of service and removing accumulated sediment. In order to determine the approximate volume of sediment that needs to be removed from each lagoon and pond, Gallup requested that Trihydro conduct a sediment investigation in each of the above mentioned bodies of water. The investigation included sampling the sediment and collecting sediment depth measurements which will assist Gallup in determining appropriate volumes and disposal methods for the sediment.

A reconnaissance event was conducted during the week of March 2, 2008. The purpose of this event was to help determine the appropriate sediment sampling and measurement methodoligies. Results of this event are discussed in Section 2. The Sediment Sampling Work Plan (Plan), prepared to assist in the investigation, was submitted to Western Refining Company on March 28, 2008. Field activities associated with the investigation were performed in accordance with the Plan unless otherwise noted in Section 3. Field investigation methodologies and results are described in detail in Section 4. Trihydro has compared the results of the analytical data with relevant screening levels that may help determine appropriate disposal of sediments. The screening levels and the results of the analytical data are described in detail in Sections 5 and 6, respectively. The approximate sediment volume calculations and investigation conclusions are discussed in Section 7.

2.0 RECONNAISSANCE FIELD EVENT

To determine the appropriate sampling techniques and sediment thickness measurement procedures, Trihydro completed a reconnaissance field event during the week of March 2, 2008. During this event, approximate water depths and sediment thicknesses were measured at six locations within Aeration Lagoon 2 and eight locations in Evaporation Pond 1.

Based on the results of the reconnaissance field event, the sediment in Aeration Lagoon 2 appeared to be stratified into two general sediment types. The uppermost sediment layer was determined to be soft, loose, and unconsolidated. This "soft sediment" ranged in thickness from approximately 8-10 feet. Similar thicknesses were encountered during the April 2008 sampling activities. During the reconnaissance event, the material underlying the soft sediment was determined to be a more compact, dense layer of sediment. This "hardpack sediment" occurs directly beneath the soft sediment and extends to the bottom of aeration lagoons. The reconnaissance field event provided information to determine the most appropriate sampling methods.

Hardpack sediment was not identified during the reconnaissance field effort in Evaporation Pond 1. Soft sediment was identified in Evaporation Pond 1 and ranged in thicknesses from approximately 2 to 4 feet. A hard layer, presumably the native soil bottom of the pond, was identified beneath the soft sediment during both field events.

3.0 DEVIATIONS FROM APPROVED PLAN

According to the Plan, at each sample location in the aeration lagoons, the soft sediment interval was to be composited and sampled and the hardpack sediment interval was to be composited and sampled. However, based on a teleconference between NMED and Gallup Refinery on April 8, 2008, the sampling methodology was modified so that one discrete-depth grab sample would be collected from each interval (soft sediment and hardpack) at each sample location at varying depths throughout the lagoons instead of compositing the entire intervals at each sample location.

Based on the March 2008 reconnaissance field event, it was presumed that only one distinct interval of sediment would be present in Evaporation Pond 1. As such, only one sediment sample was collected from each location during the April sampling event. According to the Plan, the entire sediment interval at each sampling location in Evaporation Pond 1 was to be composited and sampled. However, based on the above mentioned teleconference, one discrete-depth grab sample was collected from each sample location at varying sediment depths throughout the pond.

4.0 FIELD INVESTIGATION

Sediment measurements and samples were collected on April 7 through 11, 2008 by Trihydro personnel. The sample and measurement locations, methods, equipment, decontamination procedures, documentation and logging, and investigation derived waste (IDW) disposal are described in this section.

4.1 SITE CONDITIONS

Both lagoons and the pond are located in an area approximately 280 feet by 440 feet. Processed refinery waste water effluent from the New API Separator is discharged in to Aeration Lagoon 1 where it is furthered treated with the assistance of two large aerators. The aerators promote increased biodegradation. Water from Aeration Lagoon 1 is then routed to Aeration Lagoon 2 where it undergoes a similar process. The effluent from Aeration Lagoon 2 is drained into Evaporation Pond 1. The two aerators in Aeration Lagoon 1 were operational immediately prior to sampling activities and were shut down to allow for pond access. No aerators were operating in Aeration Lagoon 2 or Evaporation Pond 1 immediately prior to or during sampling activities. High winds with gusts up to 50 mph were common during April event.

4.2 SEDIMENT INVESTIGATION METHODOLOGY

4.2.1 SAMPLE AND SEDIMENT MEASUREMENT LOCATIONS

In order to more accurately locate appropriate and representative sediment sample and measurement locations, a grid with approximately 40 foot spacing was marked off for each lagoon and pond. Five representative sediment sample locations and five representative sediment measurement locations were selected for each lagoon. As shown on Figure 1, eight sample and eight measurement locations were selected for Evaporation Pond 1. The locations of the lagoon and pond influents, effluents, and aerators were considered when determining representative sample locations. The grids illustrated on Figure 1 were staked by Trihydro field personnel using the corners of the lagoons and pond as reference points. The density of sample locations and measuring points allowed Trihydro field personnel to sufficiently characterize the lagoons and pond.

4.2.2 SEDIMENT MEASUREMENTS

Sediment measurements in the aeration lagoons were obtained with two measuring devices: a graduated 2-inch capped PVC pipe and a graduated ¾-inch steel pole. Sediment measurements were collected at the sample locations and at the

additional measuring point locations using these two devices. The top of the soft sediment was measured by gradually inserting the PVC pipe until a slight amount of resistance was felt. The PVC was then pressed down with force until refusal was encountered. The depth that refusal with the PVC pipe was encountered is the estimated depth to the top of the hardpack sediment. For consistency, the same person took all measurements using the PVC pipe. The graduated ¾-inch steel pole was then driven to the bottom of the lagoon until refusal encountered. Due to the narrower diameter, the lack of buoyancy, and the added weight of the steel pole, it was able to be driven deeper into the sediment than the 2-inch PVC pipe. The depth at which the steel pole encountered refusal is estimated to be the bottom of the lagoon. For consistency, the same person took all measurements using the steel pole. Table 1 shows the sediment depths and thicknesses of all sampling and measuring points.

Sediment measurements were collected in a slightly different manner in Evaporation Pond 1. Evaporation Pond 1 had deeper water than the aeration lagoons. The deeper water made collecting sediment measurements with the PVC pipe difficult. Therefore, the ¾-inch graduated steel pole was used to record sediment measurements in Evaporation Pond 1 which contains only one distinct sediment interval. The steel pole was gradually inserted into the water until a slight amount of resistance was encountered. This depth is the estimated depth of the top of the soft sediment. The steel pole was then driven into the sediment until refusal was encountered. The depth at which the steel pole encountered refusal was taken to be the depth of the bottom of the pond. For consistency, the same person took all measurements using the steel pole in Evaporation Pond 1.

4.2.3 SEDIMENT SAMPLING

Several procedures were utilized to sample the sediment depending on the anticipated sediment sample depths and consistencies. The procedures and methods are discussed below.

4.2.3.1 SAMPLING METHODS AND PROCEDURES – AERATION LAGOONS

Based on the March 2008 reconnaissance field event, it was presumed that there would be two distinct layers of sediment in each of the two lagoons: a soft sediment layer and a hardpack layer. As such, two sediment samples were collected at each location. Two different sampling techniques were used to obtain representative sediment samples from the different layers: a butterfly valve-operated sediment sampler (Sediment Sampler) and a stainless steel hand auger (Auger).

Soft sediment samples were collected using the Sediment Sampler. The Sediment Sampler was pushed into the soft sediment from a boat at each sampling location. A clean, disposable, eight foot sediment core tube was used at each sample location. The core tube was driven to a sediment depth of eight feet, total depth, or until refusal was reached using a rubber mallet. Upon retrieval, the butterfly valve closes creating a suction that prevents the sediment from falling out of the bottom of the core tube. The core tube was then immediately capped until the samples could be extracted. Samples were extracted by removing the bottom and top caps off of the core tube allowing the sediment to gradually slide out onto a clean piece of plastic sheeting. Varying depths were selected at each sampling location to collect representative samples. A discrete-depth grab sample was then collected from the selected depth and placed on ice.

The Auger was used to collect discrete-depth hardpack sediment samples from sample locations in the aeration lagoons. Field personnel attempted to collect hardpack samples from as close to the original soft sediment sampling location as possible. The depths of the discrete-depth grab samples were determined in the field based on the results of the sediment measurements described in Section 4.2.2. It should be noted that much difficulty was encountered when attempting to drive the Auger to the desired sample depths. At one location, the Auger became stuck in the sediment to the extent that manual retrieval was not a safe option. Subsequently, field personnel determined that it was not safe to attempt to drive the auger to all of the desired sampled depths. As such, the Auger was driven into the sediment until the desired sample depth was achieved or until refusal. Soft sediment overlying the desired hard pack sample interval was pushed through the open top of the Auger as the Auger was driven down. After the desired depth or refusal was achieved, the hardpack sediment was extracted from the Auger, sampled, and placed on ice.

It should be noted that the soft sediment and hardpack sediment descriptions and corresponding depths on the sediment sample forms in Appendix B were obtained from the sediment collected with the Sediment Sampler and the Auger. The measurements that were used to approximate sediment volumes were obtained with the graduated, capped 2-inch PVC pipe and the graduated, ¾-inch steel pole as described in Section 4.2.2. Due to the different techniques and equipment used for sampling and measurement collecting, slight discrepancies exist between the measurements collected with the two different devices.

4.2.3.2 SAMPLING METHODS AND PROCEDURES – EVAPORATION POND 1

As mentioned in Section 2.0, no hardpack sediment was encountered in Evaporation Pond 1. Soft pack sediment sampling was performed in the same manner described for Aeration Lagoons 1 and 2. Sediment thicknesses were

much less in Evaporation Pond 1 than they were in the aeration lagoons. At sampling locations, sediment thicknesses ranged from 1.2 to 2.2 feet.

4.2.4 EQUIPMENT DECONTAMINATION PROCEDURES

Sampling equipment was decontaminated before sampling commenced and after each sample was collected. All sampling devices were decontaminated using a non-phosphate detergent solution followed by two distilled water rinses. Prior to use, the equipment was either air-dried or dried with clean paper towels. The PVC pipe and steel pole used to for collecting sediment measurements were not decontaminated in between measuring points because these devices did not come in contact with the samples.

4.2.5 FIELD DOCUMENTATION AND LOGGING

A qualified geologist was on-site to log all sediment samples. The sample logs were completed according to the Plan specifications. Sample logs are included as Appendices B. No field screening (Photo-ionization Detector) was performed because all sediment samples were collected from beneath the water of the lagoons and pond and were saturated upon retrieval.

Photographs were used to document field activities. These photographs may be used to substantiate and augment the field notes. Photographs were also taken of sediment samples that were characteristic of samples collected from the lagoons and pond. Additionally, photographs were taken to document unique features of sample media, sediment staining, or other defining features. Since the majority of the samples collected were very similar in appearance, Trihydro did not deem it necessary to take photographs of every sediment sample. Each photograph was numbered and recorded on the photograph log. The investigation photographs are included as Appendix A.

4.3 SEDIMENT CHARACTERISTICS

The sediments encountered in the aeration lagoons and Evaporation Pond 1 differed slightly. Each is described in detail below.

4.3.1 SEDIMENT CHARACTERISTICS – AERATION LAGOONS 1 AND 2

Sediment characteristics were recorded on the sediment sample forms included as Appendix B. The sediment layers encountered during sampling were not as distinct as was anticipated based on the March 2008 reconnaissance field event. A visual distinction between the two layers was not clearly evident during the April 2008 field event, however,

as described in Section 4.2.2., an attempt was made to measure the soft sediment and hardpack sediment layers in the aeration lagoons. Based on these measurements, soft sediment thickness ranged from 3.5 feet to 5.9 feet in Aeration Lagoon 1 and 5.8 feet to 8.5 feet in Aeration Lagoon 2. The sediment characteristics were similar in both ponds. The sediment is described on the sample forms as a black sludge (organic) that is generally fluid in the upper portion and thickens with depth. At some locations, varying degrees of silt content, green staining, and fibrous root content are noted. An organic odor is described throughout all sampling locations. Based on the measurements described in Section 4.2.2, the hardpack sediment ranges in thickness from 0 feet to 2.5 feet in Aeration Lagoon 1 and 0 feet to 2.2 feet in Aeration Lagoon 2. The hardpack sediment in Aeration Lagoons 1 and 2 appear to have very similar physical characteristics based on the samples collected with the Auger. The upper portion of the hardpack sediment appears to be the same as the lower portion of the soft sediment, but is slightly thicker and generally contains a greater amount of silt. The lower portion of the hardpack sediment is generally described as grey or reddish-grey clay with varying amounts of sand and silt. It is presumed that this clay is actually the base of the lagoons.

4.3.2 SEDIMENT CHARACTERISTICS – EVAPORATION POND 1

The sediment encountered in Evaporation Pond 1 appears to have very similar physical characteristics to the soft sediment encountered in the aeration lagoons. Based on the measurements described in Section 4.2.2., sediment thicknesses ranged from 1.2 feet to 5.1 feet. However, it should be noted that of the 16 locations that sediment was measured, only 5 of them had sediment thicknesses greater than 2 feet. As anticipated based on the March reconnaissance field event, only one distinct sediment layer was encountered. The sediment in Evaporation Pond 1 can generally be described as a black sludge that is fluid in the upper portions, has a silt content and thickness that increase with depth, and contains an organic odor throughout. Silt, and at some locations sand, are generally only noted in the lowest few inches of each location. Some green staining was also noted in several of the samples.

4.4 INVESTIGATION DERIVED WASTE

Excess sediment collected from the aeration lagoons and Evaporation Pond 1 was returned to the lagoons and pond from which it was collected. Wastes associated with sampling including personal protective equipment (PPE), rinse water from decontamination, and disposable sampling instruments were managed according to appropriate regulations by Gallup.

5.0 REGULATORY CRITERIA

This investigation was internally driven in order to characterize and approximate the volume of sediment in each of the lagoons and pond. As such, no regulatory screening levels have been designated as the clean up criteria of the sediment. However, since the data obtained in this investigation may be utilized to determine appropriate disposal options for the sediment upon pond/lagoon closure, Trihydro included a comparison of the analytical results to the EPA's Maximum Concentration of Contaminants for the Toxicity Characteristic and NMED's Industrial Soil Screening Levels. These comparisons are illustrated on Table 2 and described in detail in Section 7.2.

6.0 ANALYTICAL RESULTS

Laboratory sampling analyses included diesel range organics (DRO)/gasoline range organics (GRO) by USEPA method 8015, semi-volatile organic compounds (SVOCs) by USEPA method 8270, volatile organic compounds (VOCs) by USEPA method 8260, RCRA metals by USEPA method 6010C, and mercury by USEPA Method 7471. The laboratory results are included as Appendix C. The sample data is summarized in Table 2.

6.1 TOTAL PETROLEUM HYDROCARBONS (TPH)

DRO was detected in each of the sediment samples at concentrations ranging from 7,200 mg/kg to 370,000 mg/kg. MRO was detected in 11 of the 28 samples analyzed at concentrations ranging from 25,000 mg/kg to 37,000 mg/kg and was detected in each body of water including both the soft sediment and the hardpack sediment samples in the aeration lagoons. GRO was detected in each Aeration Lagoon 1 sample (soft sediment and hardpack) and one Aeration Lagoon 2 sample (soft sediment) at concentrations ranging from 150 mg/kg to 670 mg/kg. GRO was not detected in any of the Evaporation Pond 1 samples. The average total TPH concentration (DRO + MRO + GRO) for Aeration Lagoon 1, Aeration Lagoon 2, and Evaporation Pond 1 was 133,870 mg/kg, 193,343 mg/kg, and 164, 750 mg/kg, respectively. The average TPH concentrations were higher in the soft sediment samples than the hardpack sediment samples in both aeration lagoons. When comparing the average TPH concentrations of the soft sediment samples to the hardpack samples, the Aeration Lagoon 1 showed a 22 percent decrease and Aeration Lagoon 2 showed a 54 percent decrease.

6.2 METALS

The suite of metals for which the samples were analyzed consisted of arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Of these, arsenic, barium, cadmium, chromium, lead, and mercury were detected in each sample. Selenium and silver were not detected in any samples analyzed. Arsenic concentrations ranged from 3.2 mg/kg to 47 mg/kg, barium concentrations ranged from 81 mg/kg to 500 mg/kg, cadmium concentrations ranged from 0.12 mg/kg to 6.6 mg/kg, chromium concentrations ranged from 8.3 mg/kg to 60 mg/kg, lead concentrations ranged from 9.7 mg/kg to 220 mg/kg, and mercury concentrations ranged from 2.1 mg/kg to 18 mg/kg. The average total-metal concentrations (arsenic + barium + cadmium + chromium + lead + mercury) decreased in the direction of water flow: Aeration Lagoon 1 showed an average metal concentration of 398 mg/kg, Aeration Lagoon 2 showed an average metal concentration of 349 mg/kg, and Evaporation Pond 1 showed an average metal concentration of 313 mg/kg. In Aeration Lagoon 1, the average metal concentration was 45 percent higher in the hardpack sediment than it was in the

soft sediment. In Aeration Lagoon 2, the average metal concentration was 22 percent higher in the soft sediment than it was in the hardpack sediment.

6.3 SEMI-VOLATILE ORGANIC COMPOUNDS

Each sample was analyzed for a suite of 69 SVOCs using USEPA method 8270C (see Appendix C). Of these constituents, the following compounds were detected in one or more of the lagoon and pond samples: benzo(a)anthracene, chrysene, fluorene, 2-methylnaphthalene, 3+4-methylnaphthalene, naphthalene, phenanthrene, phenol, and pyrene. The average total SVOC concentration (the sum of the above mentioned analytes) for Aeration Lagoon 1, Aeration Lagoon 2, and Evaporation Pond 1 was 609 mg/kg, 418 mg/kg, and 519 mg/kg, respectively. The average SVOC concentrations of the soft sediment samples in Aeration Lagoon 1 and 2 were 32 percent and 66 percent higher than that of the hardpack sediment samples in the lagoons, respectively.

6.4 VOLATILE ORGANIC COMPOUNDS

Each sample was analyzed for a suite of 65 VOCs using USEPA method 8260B (see Appendix C). Of these constituents, the following compounds were detected in one or more of the lagoon/pond samples: benzene, toluene, ethylbenzene, MTBE, 1,2,4-trimethylbenzne, 1,3,5-trimethylbenzene, naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, carbon disulfide, isopropylbenzene, 4-isopropyltoluene, n-butylbenzene, n-propylbenzene, sec-butylbenzene, and xylenes. The average total VOC concentrations (the sum of the above mentioned analytes) decreased in the direction of water flow. Aeration Lagoon 1 had an average total VOC concentration of 161 mg/kg, Aeration Lagoon 2 had an average total VOC concentration of 54 mg/kg, and Evaporation Pond 1 had an average total VOC concentration of 24 mg/kg. In Aeration Lagoon 1, the average total VOC concentration in the hardpack sediment was 3 percent higher than average total VOC concentrations in the soft sediment. In Aeration Lagoon 2, the average total VOC concentration was 68 percent higher in the soft sediment than it was in the hardpack sediment.

6.5 QUALITY ASSURANCE/QUALITY CONTROL PROTOCOL

Analytical data was validated through EPA Tier 1 and Tier 2 data validation standards. Analytical parameters, such as surrogate recoveries and duplicate sample analyses, were reviewed to verify the quality of data submitted. Laboratory data were also validated to verify that the samples were analyzed according to the specified USEPA Methods. Based on the Tier II data validation, qualifiers were added to the laboratory results due to high Matrix Spike (MS) and Matrix Spike Duplicate (MSD) results, high Relative Percent Difference (RPD)s, low surrogate recoveries, and severe matrix

interference. Results were flagged with a “J”, indicating that the detection value is estimated, or with a “UJ”, indicating that the reporting limit is estimated. No data was rejected based on the Tier II data validation. The analytical results are included as Appendix C and the data validations are included as Appendix D. Field QAQC measures included the collection of one blind duplicate per 20 samples collected, the collection of one MS and MSD sample set, and the collection of one equipment blank per day of sampling with non-disposable sampling equipment.

7.0 CONCLUSIONS

The purpose of this report was to describe the field activities implemented to determine approximate sediment volumes and to characterize the sediment for Aeration Lagoon 1, Aeration Lagoon 2, and Evaporation Pond 1. The conclusions of the investigation are discussed below.

7.1 SEDIMENT VOLUMES

Figure 1 illustrates the approximate dimensions of Aeration Lagoon 1, Aeration Lagoon 2, Evaporation Pond 1, and the sampling and measuring point locations. These dimensions and sediment measurements were used as input parameters in SurvCAD to approximate sediment volumes for each body of water. SurvCAD volume calculations are included as Appendix E. SurvCAD estimates approximately 1464 cubic yards of soft sediment and 229 cubic yards of hardpack sediment have accumulated in Aeration Lagoon 1. SurvCAD estimates approximately 3404 cubic yards of soft sediment and 430 cubic yards of hardpack sediment have accumulated in Aeration Lagoon 2. As mentioned in Section 4.3.1, the distinction between the soft sediment and hardpack sediment in the aeration lagoons was not as evident as had been anticipated based on the March 2008 reconnaissance event. Because of this, for the purposes of disposal options, it may be easier to consider the entire sediment layer as one total volume for the lagoons. With this in mind, the total volume of sediments in Aeration Lagoons 1 and 2 are 1693 cubic yards and 3834 cubic yards, respectively. SurvCAD estimates that there is approximately 3178 cubic yards of sediment in Evaporation Pond 1. It should be noted that the above volume calculations are in-situ calculations and that the no expansion or compaction factors have been applied. If sediment removal is determined to be an appropriate option, appropriate factors should be applied.

7.2 SEDIMENT CHARACTERIZATION

Analytical results of the sediment samples are discussed in detail in Section 6 and summarized on Table 2 As previously mentioned, the data obtained during this investigation may be utilized to determine appropriate disposal options for the sediment in the evaporation pond and aeration lagoons. As such, Trihydro included a comparison of the analytical results to the EPA's Maximum Concentration of Contaminants for the Toxicity Characteristic and NMED's Industrial Soil Screening Levels. EPA's Maximum Concentrations of Contaminants for the Toxicity Characteristic may be found in CFR Title 40 Part 261 – Identification and Listing of Hazardous Waste. These numbers are generated as screening levels for Toxicity Characteristic Leaching Procedure (TCLP) method 1311. The analysis performed on the sediment samples collected for this investigation were total constituent analysis, not TCLP. EPA does allow a total constituent analysis (as performed for Gallup's sediment samples) in lieu of the TCLP extraction. However, the results

of the total constituent analysis must be divided by twenty to be compared to the TCLP screening levels. The Maximum Concentrations of Contaminants for the Toxicity Characteristic listed of Table 2 of this report have been multiplied by 20 to adjust for the different analysis. Furthermore, the multiplier of 20 assumes that the samples were 100% solid.

As shown in Table 2, elevated concentrations of lead, mercury, arsenic, and benzo(a)anthracene were identified during this investigation. When compared to the Maximum Concentrations of Contaminants for the Toxicity Characteristic, the metals concentrations show the potential for the sediment to be characteristically hazardous. However, comparisons made should be considered estimates and the final characterization of the material should be determined during profiling.

Twenty-six samples from various depths of the three bodies of water exceeded the screening adjusted Maximum Concentrations of Contaminants for the Toxicity Characteristic screening level for mercury. Three samples exceeded this screening level for lead. It should be noted that the three samples that exceeded the lead screening level were collected from the hardpack sediment of Aeration Lagoon 1.

NMED's Industrial Soil Screening Levels may be found on Table A-1 of NMED Soil Screening Levels. Ten samples exceeded the industrial soil screening level for arsenic, and one sample exceeded the industrial soil screening level for benzo(a)anthracene. The arsenic exceedences came from the soft sediment and hardpack sediment of Aeration Lagoon 1, the soft sediment and hardpack of Aeration Lagoon 2, and sediment obtained from Evaporation Pond 1. The benzo(a)antrhacene exceedence came from Evaporation Pond 1.

It is important to note that since this investigation was internally driven, no official screening standards have been set and that disposal methods should not be determined based on the above mentioned exceedences. If the sediment is to be shipped off-site for disposal, TCLP analysis will likely be required to make a hazardous/non-hazardous determination.

TABLES

TABLE 1. SEDIMENT DEPTH AND THICKNESS MEASUREMENTS,
GALLUP REFINERY, WESTERN REFINING COMPANY, GALLUP, NEW MEXICO

Aeration Lagoon 1						
Measuring Point	**Depth to Soft Sediment**	**Soft Sediment Thickness**	**Depth to Hardpack**	**Hardpack Thickness**	**Total Depth**	**Total Sediment Thickness**
AL1-1	3.0	3.5	6.5	2.5	9.0	6.0
AL1-2	1.0	3.5	None	0.0	4.5	3.5
AL1-3	4.0	4.5	8.5	0.6	9.1	5.1
AL1-4	1.0	5.3	6.3	1.2	7.5	6.5
AL1-5	2.5	4.0	6.5	0.5	7.0	4.5
AL1-A	0.5	4.2	None	0.0	4.7	4.2
AL1-B	2.0	5.9	None	0.0	7.9	5.9
AL1-C	5.0	3.2	8.2	0.4	8.6	3.6
AL1-D	1.0	5.3	None	0.0	6.3	5.3
AL1-E	0.5	4.5	None	0.0	5.0	4.5

Aeration Lagoon 2						
Measuring Point	**Depth to Soft Sediment**	**Soft Sediment Thickness**	**Depth to Hardpack**	**Hardpack Thickness**	**Total Depth**	**Total Sediment Thickness**
AL2-1	1.5	7.3	8.8	0.7	9.5	8.0
AL2-2	2.0	7.5	None	0.0	9.5	7.5
AL2-3	2.5	8.5	11.0	1.1	12.1	9.6
AL2-4	1.5	8.0	9.5	0.8	10.3	8.8
AL2-5	1.5	6.5	8.0	1.5	9.5	8.0
AL2-A	1.5	8.2	9.7	0.8	10.5	9.0
AL2-B	1.5	8.2	9.7	1.3	11.0	9.5
AL2-C	2.0	8.0	10.0	0.5	10.5	8.5
AL2-D	2.0	6.7	8.7	2.2	10.8	8.8
AL2-E	4.0	5.8	9.8	0.7	10.5	6.5

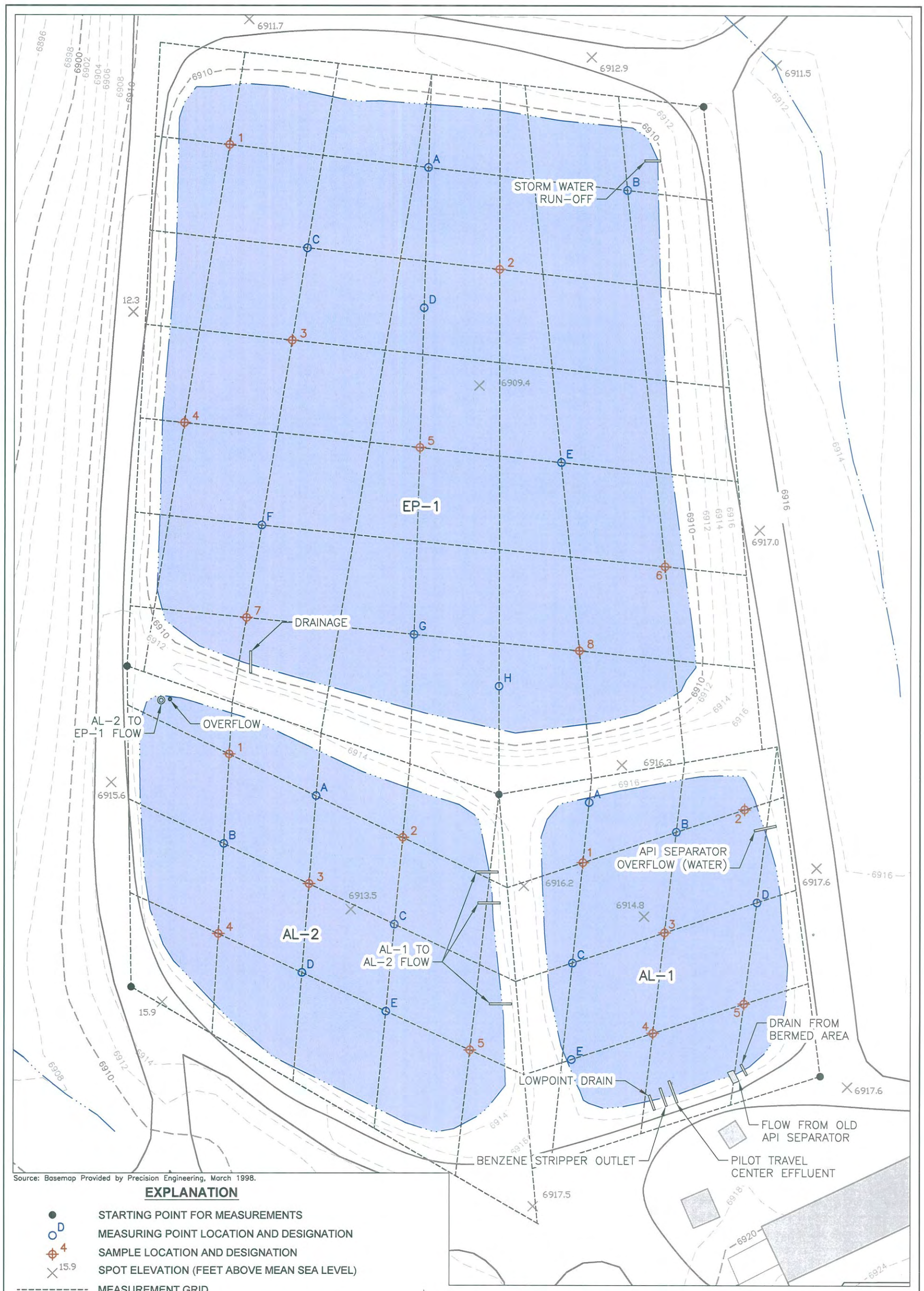
Evaporation Pond 1						
Measuring Point	**Depth to Soft Sediment**	**Soft Sediment Thickness**	**Depth to Hardpack**	**Hardpack Thickness**	**Total Depth**	**Total Sediment Thickness**
EP1-1	5.5	2.2	None	None	7.7	2.2
EP1-2	9.7	1.3	None	None	11.0	1.3
EP1-3	7.9	1.7	None	None	9.6	1.7
EP1-4	7.8	1.5	None	None	9.3	1.5
EP1-5	11.4	1.3	None	None	12.7	1.3
EP1-6	4.3	1.5	None	None	5.8	1.5
EP1-7	6.8	1.2	None	None	8.0	1.2
EP1-8	5.3	1.7	None	None	7.0	1.7
EP1-A	10.0	1.6	None	None	11.6	1.6
EP1-B	6.0	2.1	None	None	8.1	2.1
EP1-C	7.5	4.3	None	None	11.8	4.3
EP1-D	7.3	5.1	None	None	12.4	5.1
EP1-E	5.1	1.5	None	None	6.6	1.5
EP1-F	6.9	1.8	None	None	8.7	1.8
EP1-G	8.0	3.2	None	None	11.2	3.2
EP1-H	6.0	1.6	None	None	7.6	1.6

TABLE 2. ANALYTICAL DATA SUMMARY,
GALLUP REFINERY, WESTERN REFINING COMPANY, GALLUP, NEW MEXICO

		TPH			Metals						SVOCs									VOCs															
Sample ID	Sample Depth (ft below top of sediment)	DRO (mg/kg)	MRO (mg/kg)	GRO (mg/kg)	**Mercury (mg/kg)**	*Arsenic (mg/kg)*	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	**Lead (mg/kg)**	*Benzo(a) anthracene (mg/kg)*	Chrysene (mg/kg)	Fluorene (mg/kg)	2-Methyl naphthalene as SVOC (mg/kg)	3+4-Methylphenol (mg/kg)	Naphthalene as SVOC (mg/kg)	Phenanthrene (mg/kg)	Phenol (mg/kg)	Pyrene (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	MTBE (mg/kg)	1,2,4 - Trimethyl benzene (mg/kg)	1,3,5-Trimethyl benzene (mg/kg)	Napthalene as VOC (mg/kg)	1-Methyl napthalene (mg/kg)	2-Methyl naphthalene as VOC (mg/kg)	Carbon disulfide (mg/kg)	Isopropyl benzene (mg/kg)	4-Isopropyl toluene (mg/kg)	n-Butylbenzne (mg/kg)	n-Propyl benzene (mg/kg)	sec-Butylbenzene (mg/kg)	Xylenes (mg/kg)
AL1-1-SS	4.8	71000	ND	300	**19**	*29*	140	0.64	44	23	ND	ND	ND	190	ND	53	50	34	ND	3.6	17	4.3	ND	11	2.7	10	13	21	ND	0.64	ND	0.65	1.4	ND	27
AL1-2-SS	2.3	190000	25000	560	**11**	11	190	0.69	19	79	ND	ND	70	460	42	79	210	35	39	5.1	32	10	1.1	26	6.7	19	42	44	ND	1.8	1	2.6	4.7	1.9	56
AL1-3-SS	3.3	54000	ND	170	**7**	12	210	0.18	16	25	ND	ND	36	200	ND	41	84	ND	ND	1.3	5.7	1.8	ND	6.7	1.7	4	10	15	ND	ND	ND	1.7	0.85	0.82	12
AL1-4-SS	5.6	190000	ND	280	**9.5**	9.5	280	0.48	24	38	ND	33	91	530	ND	94	200	ND	44	4.2	19	5.7	ND	18	4.1	14	28	45	ND	0.79	0.56	1.3	2.4	1.3	33
AL1-5-SS	0.8	220000	ND	280	**9.9**	12	360	0.2	13	30	ND	ND	84	600	ND	110	220	ND	ND	5.9	24	6.1	1.1	16	4	14	29	43	ND	1.2	0.71	3	2.5	1.2	35
AL1-1-HP	5.5	7200	ND	240	3.1	11	150	1.2	40	23	ND	ND	ND	23	6.2	6.7	8.4	6.7	ND	1.2	6.8	2.9	ND	12	3.3	7.2	15	22	ND	0.72	0.54	2.7	1.7	0.96	18
AL1-2-HP	3.0	200000	37000	260	**5**	*32*	350	1.4	51	**110**	ND	34	40	260	98	65	140	54	ND	2.4	11	3.4	ND	10	2.8	6.5	14	20	ND	0.58	ND	2.1	1.5	0.8	20
AL1-3-HP	3.8	110000	ND	150	**6.7**	11	220	0.12	16	22	ND	ND	40	200	ND	36	100	ND	ND	2	7	1.9	ND	8.3	2	5.9	15	20	ND	0.51	0.53	2.1	1.2	0.89	12
AL1-4-HP	5.1	76000	ND	590	**8.3**	*47*	310	1.4	60	**220**	ND	31	ND	340	ND	90	84	ND	ND	3.2	22	11	ND	37	10	21	29	46	ND	1.6	0.84	7	5.9	1.8	60
AL1-5-HP	3.4	130000	25000	670	**18**	*31*	450	0.79	46	**110**	ND	ND	47	460	47	110	130	ND	ND	9	48	15	0.74	26	7.4	19	28	42	ND	2.6	0.9	4.9	4.8	1.9	81
AL2-1-SS	6.0	50000	ND	ND	**8.4**	*20*	260	6.6	30	48	ND	ND	ND	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AL2-2-SS	4.5	260000	31000	ND	**6.8**	13	500	0.32	21	24	ND	ND	98	450	ND	38	230	ND	ND	ND	2.1	0.72	ND	4.5	1.1	5.8	26	37	ND	ND	ND	1	ND	ND	4.9
AL2-3-SS	0.5	300000	29000	ND	**8.9**	8.4	350	0.42	14	24	ND	32	43	300	ND	ND	250	ND	47	ND	1.2	ND	ND	2.9	0.54	4.6	21	27	ND	ND	ND	0.66	ND	ND	2.8
AL2-4-SS	3.0	250000	35000	ND	**8.1**	14	190	0.42	16	32	ND	ND	44	190	ND	44	210	ND	ND	ND	1.6	0.56	ND	4.1	0.72	5.4	24	30	ND	ND	ND	1.1	ND	ND	4
AL2-5-SS	0.5	370000	ND	430	**6.8**	4.6	310	0.31	12	18	ND	ND	70	550	ND	85	250	ND	36	2.3	18	6.4	ND	17	5.6	15	43	35	ND	1.7	1	3.4	3	2	39
AL2-1-HP	7.4	120000	28000	ND	**7.4**	*18*	81	2.4	29	32	ND	42	ND	ND	99	ND	50	ND	38	ND	0.6	ND	ND	0.93	ND	ND	2.5	2.4	ND	ND	ND	ND	ND	ND	1.9
AL2-2-HP	9.8	130000	ND	ND	**6.4**	*20*	300	0.73	22	39	ND	ND	36	140	36	ND	93	ND	ND	ND	1.1	ND	ND	3	0.71	3.2	11	15	ND	ND	ND	0.56	ND	ND	3.8
AL2-3-HP	9.1	110000	ND	ND	2.1	9.8	280	0.26	15	12	ND	ND	32	110	44	ND	89	ND	ND	ND	0.53	0.62	ND	3.8	0.87	3.4	12	17	ND	ND	ND	0.89	ND	ND	4.3
AL2-4-HP	8.4	140000	29000	ND	**6.4**	*21*	270	5.2	45	55	ND	ND	ND	57	100	ND	55	43	ND	ND	1.1	ND	ND	ND	ND	1.6	5.7	7.2	ND	ND	ND	ND	ND	ND	3.2
AL2-5-HP	7.5	51000	ND	ND	**4.7**	14	160	0.62	53	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.1	ND	1.2	5.4	6.6	5.8	ND	ND	ND	ND	ND	1.8
EP1-1	1.1	200000	ND	ND	**6.8**	5.4	400	0.45	9.7	16	ND	45	53	370	53	31	330	ND	47	ND	0.51	ND	ND	1.5	ND	2.6	12	16	ND	ND	ND	ND	ND	ND	ND
EP1-2	1.1	150000	ND	ND	**4.4**	17	190	0.58	24	18	ND	ND	ND	58	34	ND	71	ND	ND	ND	0.51	ND	ND	1.4	ND	1.4	5.8	7.7	ND	ND	ND	ND	ND	ND	1
EP1-3	1.5	110000	ND	ND	**5.1**	6.5	220	0.43	13	15	ND	ND	47	140	60	ND	130	ND	ND	ND	0.68	ND	ND	1.2	ND	1.3	4.9	6.8	ND	ND	ND	ND	ND	ND	1.1
EP1-4	1.1	130000	27000	ND	**9.6**	*26*	330	6.4	41	39	ND	ND	59	180	86	ND	210	ND	40	ND	0.65	ND	ND	1.3	ND	1.7	6	7.6	ND	ND	ND	ND	ND	ND	1.2
EP1-5	1.1	120000	ND	ND	**6**	*23*	150	0.97	23	22	ND	57	42	130	140	ND	150	ND	48	ND	0.69	ND	ND	1.5	ND	1.9	7.1	10	ND	ND	ND	ND	ND	ND	1.7
EP1-6	0.8	180000	26000	ND	**4.1**	3.2	330	0.26	8.8	16	ND	40	70	210	ND	ND	150	ND	41	ND	0.63	ND	ND	2.2	ND	2.8	15	19	ND	ND	ND	ND	ND	ND	1.3
EP1-7	1.0	200000	25000	ND	**4.4**	3.6	280	0.27	8.3	9.7	*35*	74	77	260	ND	ND	240	ND	70	ND	ND	ND	ND	1.7	ND	1.7	9.1	12	ND	ND	ND	ND	ND	ND	ND
EP1-8	1.5	150000	ND	ND	**4.9**	11	120	0.8	58	15	ND	ND	41	110	ND	ND	120	ND	ND	ND	0.54	ND	ND	1.2	ND	1.6	8.1	11	ND	ND	ND	ND	ND	ND	ND
EPA Maximum Concentration of Contaminants for the Toxicity Characteristic (X 20 to adjust for total constituent concentrations)		**NA**	**NA**	**NA**	**4**	**100**	**2000**	**20**	**100**	**100**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**10**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NMED Table A-1 Soil Screening Levels (Industrial)		*NA*	*NA*	*NA*	*10000***	*17.7*	*100000*	*564*	*3400**	*800*	*23.4*	*2310*	*26500*	*NA*	*NA*	*300*	*20500*	*100000*	*30900*	*25.8*	*252*	*128*	*984*	*213*	*69.2*	*300*	*NA*	*NA*	*460*	*389*	*NA*	*62.1*	*62.1*	*60.6*	*82*

*Chromium VI screening level used.
**Elemental Mercury screening level used.
Bold concentrations indicate exceedence of EPA Maximum Concentration of Contaminants for the Toxicity Characteristic.
Highlighted italic concentrations indicate exceedence of NMED Table A-1 Soil Screening Levels (Industrial).

FIGURES



Trihydro CORPORATION
1252 Commerce Drive
Laramie, Wyoming 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 1

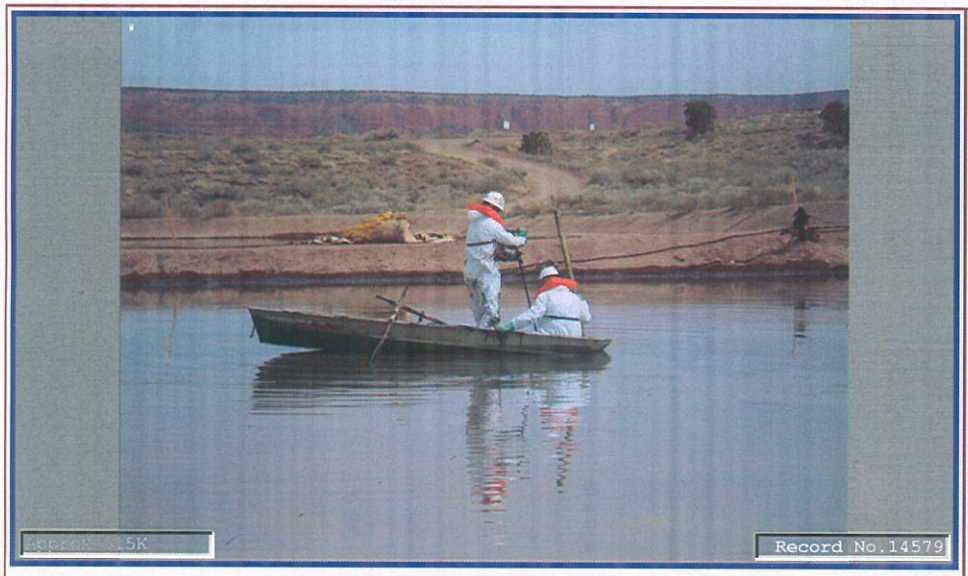
SEDIMENT MEASUREMENT AND SAMPLE LOCATIONS FOR AERATION LAGOONS 1&2 AND EVAPORATION POND 1

WESTERN REFINING COMPANY L.L.C.
GALLUP REFINERY
GALLUP, NEW MEXICO

Drawn By: REP	Checked By: SS	Scale: 1" = 40'	Date: 4/22/08	File: 072SAMPPOINTS200804

APPENDIX A

INVESTIGATION PHOTOS



Sampling with hand auger at AL2-3

Date: 4/8/2008 Direction: S Taken By: SS
File: evap ponds 003.jpg Job Number: 697-019-001

Extracting auger core from auger at AL2-3.

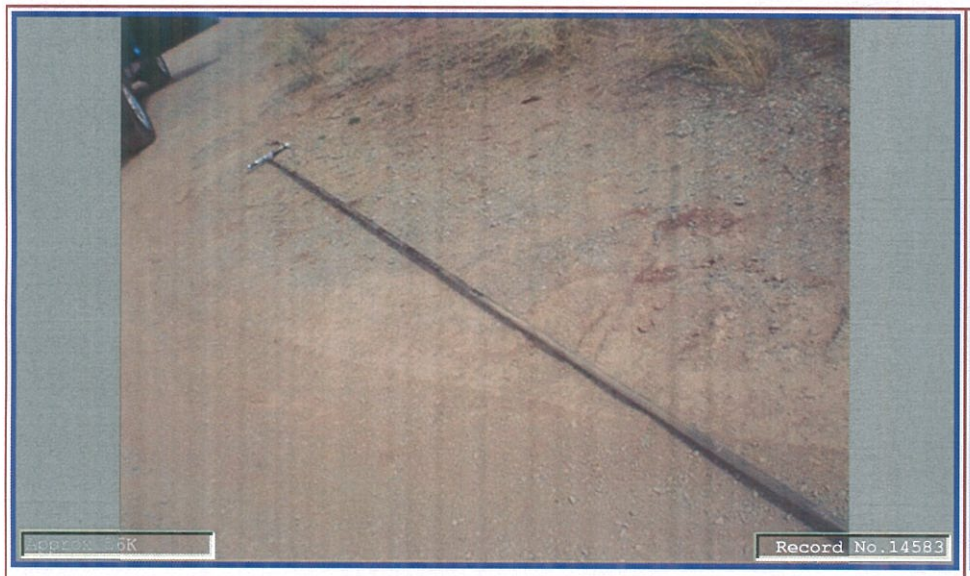
Date: 4/8/2008 Direction: W Taken By: SS
File: evap ponds 004.jpg Job Number: 697-019-001

View of grey clay representative of bottom of aeration lagoons, taken from AL2-3.

Date: 4/8/2008 Direction: N Taken By: SS
File: evap ponds 005.jpg Job Number: 697-019-001

Filling AL2-3 sample jar.

Date: 4/8/2008 Direction: W Taken By: SS
File: evap ponds 006.jpg Job Number: 697-019-001



Hardpack sediment measurement instrument (3/4" graduated steel rod).

Date: 4/9/2008 Direction: E Taken By: SS
File: evap ponds 007.jpg Job Number: 697-019-001

Hardpack sediment measurement instrument (3/4" graduated steel rod) - zoom in.

Date: 4/9/2008 Direction: E Taken By: SS
File: evap ponds 008.jpg Job Number: 697-019-001

Storm water run-off pipe - Evaporation Pond 1

Date: 4/10/2008 Direction: SE Taken By: SS
File: evap ponds 009.jpg Job Number: 697-019-001

Overflow drain - Evaporation Pond 1

Date: 4/10/2008 Direction: SW Taken By: SS
File: evap ponds 010.jpg Job Number: 697-019-001

Drainage pipes - Evaporation Pond 1

Date: 4/10/2008 Direction: W Taken By: SS
File: evap ponds 011.jpg Job Number: 697-019-001

Hardpack sample from AL2-4, characterisic of the hardpack of Aeration Lagoons 1 and 2.

Date: 4/10/2008 Direction: W Taken By: SS
File: evap ponds 012.jpg Job Number: 697-019-001

Extracted sample from AL2-4 auger.

Date: 4/10/2008 Direction: W Taken By: SS
File: evap ponds 013.jpg Job Number: 697-019-001

Extracted sample from AL2-4 auger - close up.

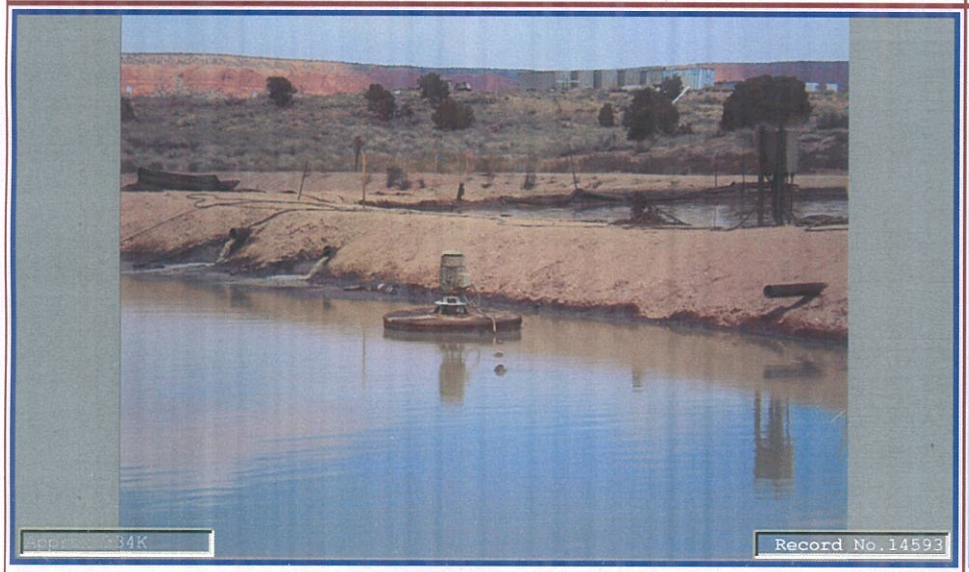
Date: 4/10/2008 Direction: W Taken By: SS
File: evap ponds 014.jpg Job Number: 697-019-001

AL1 pipe - API separator water section overflow.

Date: 4/10/2008 Direction: E Taken By: SS
File: evap ponds 015.jpg Job Number: 697-019-001

AL1 pipes - (left - pilot travel ctr effluent) (middle - benzene stripper outlet) (right low point drain).

Date: 4/10/2008 Direction: NE Taken By: SS
File: evap ponds 016.jpg Job Number: 697-019-001



AL2 pipes - (all - water from AL1 to AL2).

Date: 4/10/2008 Direction: NE Taken By: SS
File: evap ponds 017.jpg Job Number: 697-019-001

AL2 pipe - flow from AL2 to EVP 1 + overflow.

Date: 4/10/2008 Direction: N Taken By: SS
File: evap ponds 018.jpg Job Number: 697-019-001

AL1 pipes - (left - drain for bermed area) (right - from old API separator to AL1)

Date: 4/10/2008 Direction: SE Taken By: SS
File: evap ponds 019.jpg Job Number: 697-019-001

Sampling AL1-3 with Sediment Sampler.

Date: 4/10/2008 Direction: NE Taken By: SS
File: evap ponds 020.jpg Job Number: 697-019-001

AL1-1 sample in auger core displaying grey clay characteristic of the bottom of both lagoons.

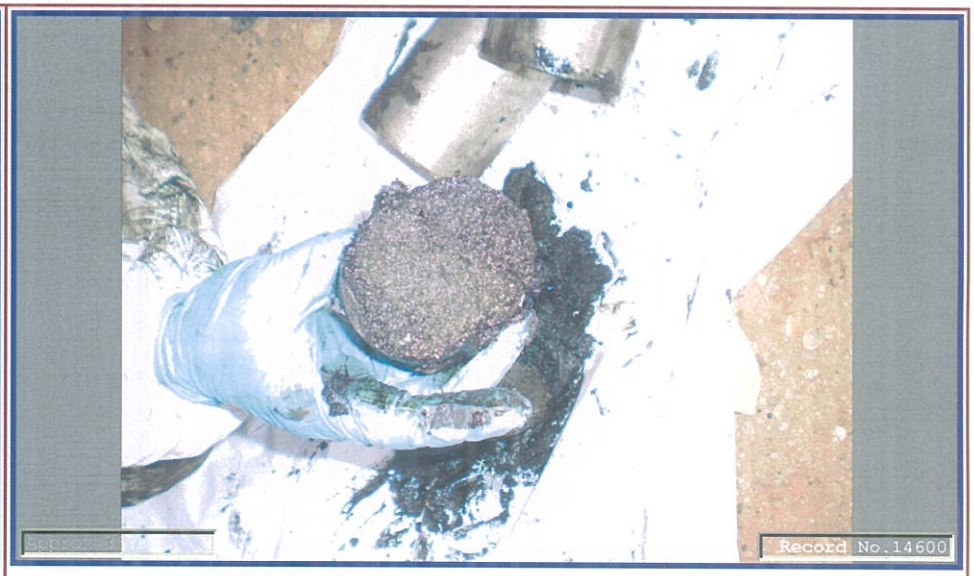
Date: 4/10/2008 Direction: N/A Taken By: SS
File: evap ponds 021.jpg Job Number: 697-019-001

same as above, better shot of the clay.

Date: 4/10/2008 Direction: N/A Taken By: SS
File: evap ponds 022.jpg Job Number: 697-019-001

AL1-1 black silty sludge characteristic of the lower portion of most HP samples.

Date: 4/10/2008 Direction: N/A Taken By: SS
File: evap ponds 023.jpg Job Number: 697-019-001



AL1-1 showing the fibrous roots and green staining.

Date: 4/10/2008 Direction: N/A Taken By: SS
File: evap ponds 024.jpg Job Number: 697-019-001

AL1-1 HP extracted onto plastic sheeting showing the difference between the clay and the sludge.

Date: 4/10/2008 Direction: N/A Taken By: SS
File: evap ponds 025.jpg Job Number: 697-019-001

APPENDIX B

SEDIMENT SAMPLE FORMS

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-1	Sample Date:	4/10/2008
Location:	Aeration Lagoon 1	Sample Time SS:	1710
Samplers:	GP/SM	Sample Time HP:	1525
Weather:	Cold, windy	Photo Numbers:	23-27

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 4.5' - 5'

Sample Depth HP: 5.3' - 5.7'

Sample Description:

Soft Sediment:

3.5' - 4.2' Black sludge, fluid, organic odor.

4.2' to 5' Black sludge, silty, green staining, soft, organic odor.

Note: upper portion of SS lost upon extraction - very fluid.

Hard Pack Sediment: 4.8' to 5.7' Refusal at 5.7'.

4.8' to 5.3' Black sludge, silty, abundant fibrous roots, some green staining, very soft, organic odor.

5.3' to 5.7' Grey clay, some silt/fine sand, green staining, soft, plastic, slight organic odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-2	Sample Date:	4/10/2008
Location:	See map	Sample Time SS:	1725
Samplers:	GP/SM	Sample Time HP:	1622
Weather:	Cold, windy	Photo Numbers:	None

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 2' to 2.5'

Sample Depth HP: 2.7' to 3.3'

Sample Description:

Soft Sediment:

0'- 1' Black sludge, fluid, flows under own weight, very soft, organic odor.

1' - 2.5' SAA, green staining, trace silt, thicker than above, stays intact under own weight.

2.5' - 3.5' SAA, silty.

Hard Pack Sediment:

2.7' - 3.3' Black sludge, silty, very soft, organic odor, stays intact under own weight, consistency thickens with depth.

3.3' - 3.5' Grey clay, silty, some sand, soft, plastic, organic odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-3	Sample Date:	4/10/2008
Location:	See map	Sample Time SS:	1735
Samplers:	GP/SM	Sample Time HP:	1445
Weather:	Cold, windy	Photo Numbers:	22

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 3' - 3.5'

Sample Depth HP: 3.5' - 4'

Sample Description:

Soft Sediment:

0' - 1' Black sludge, fluid, flows under own weight, organic odor.

1' - 4' Black sludge, trace silt, slight green staining, very soft, barely intact under own weight, thicker w/depth, organic odor.

Hard Pack Sediment: 3.5' - 4.3'. Refusal at 4.3'.

3.5' - 4' Soupy black sludge, trace of fines, organic odor, somewhat fluid, very soft.

4' - 4.3' Grey clay, some silt/fine sand, soft, plastic, organic odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-4	Sample Date:	4/10/2008
Location:	See map	Sample Time SS:	1755
Samplers:	GP/SM	Sample Time HP:	1050
Weather:	Cold, windy	Photo Numbers:	None

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 5.3' - 5.8'

Sample Depth HP: 4.8' - 5.3'

Sample Description:

Soft Sediment:

5.3' - 6.5' Black silty sludge, intact under own weight, some roots, slight green tint, thicker w/depth, organic odor.

Note: upper portion of SS lost during extraction, very fluid.

Hard Pack Sediment: 4.6' - 5.4' Refusal at 5.4'.

4.6' - 4.8' Black sludge, soupy, fluid, ammonia/organic odor, very soft.

4.8' - 5.3' SAA, thicker, slight green tint.

5.3' - 5.4' Grey clay, soft, some sand/silt, plastic, same odor as above.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-5	Sample Date:	4/10/2008
Location:	See map	Sample Time SS:	800
Samplers:	GP/SM	Sample Time HP:	1020
Weather:	Cold, windy	Photo Numbers:	None

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 0.5' - 1'

Sample Depth HP: 3' - 3.7'

Sample Description:

Soft Sediment:

0' - 3' Black silty sludge, stays intact under own weight, light green tint, very soft, some roots, organic odor.

Hard Pack Sediment: 3' - 3.8' Refusal at 3.8'.

3' - 3.7' Black sludge, stays intact under own weight, very soft, slight green tint, slight ammonia/organic odor.

3.7' - 3.8' Light grey clay, some fine sand, soft, plastic, same ammonia/organic odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-1	Sample Date:	4/8/2008 - 4/9/2008
Location:	See map	Sample Time SS:	1010 4/9/2008
Samplers:	GP/SM	Sample Time HP:	1105 4/8/2008
Weather:	Cold, breezy	Photo Numbers:	None

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 5.5' - 6.5'

Sample Depth HP: 7' - 7.8'

Sample Description:

Soft Sediment:

0'- 1.5' Black sludge, soupy, fluid, organic odor.

1.5' - 6.5' Black sludge, much thicker, light green tint, soft, horse manure odor, plastic, fibrous roots, organic material, fibrous.

Hard Pack Sediment:

7' - 7.8' Black sludge, silty, some clay, roots (fuzzy), slight ammonia odor, soft, plastic.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-2	Sample Date:	4/8/2008
Location:	See map	Sample Time SS:	1555
Samplers:	GP/SM	Sample Time HP:	1515
Weather:	Cold, light wind	Photo Numbers:	3-6

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 4' - 5'

Sample Depth HP: 6.4' - 6.8'

Sample Description:

Soft Sediment:

0'- 6' Black sludge, soupy, thicker towards bottom (~2'- 6'), slight organic odor, not ammonia.

Hard Pack Sediment: 6.4' - 7.3' Refusal at 7.3'.

6.4' - 6.8' Black sludge, very soft, soupy, some roots, slight odor, fluid, trace of green throughout.

6.8' - 7.3' Grey clay, some silt-fine sand, soft, plastic, trace gravel, roots, no odor, red in lowest inch.

Comments: BD-1 collected at 4' - 5'

Auger became stuck in mud at 7.3'. Had to pull out with truck. Bent auger extension, sample from 6.4' - 7.3' retrieved.

Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-3	Sample Date:	4/8/2008 - 4/9/2008
Location:	See map	Sample Time SS:	1000 (4/9/2008)
Samplers:	GP/SM	Sample Time HP:	1215 (4/8/2008)
Weather:	Warm, breezy	Photo Numbers:	3

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 0' - 1'

Sample Depth HP: 8.8' - 9.4'

Sample Description:

Soft Sediment:

0'- 5.5' Black sludge, very soft, fluid, thicker with depth, organic odor, plastic, trace roots throughout.

Hard Pack Sediment: 8.8' - 9.6' Refusal at 9.6'.

8.8' - 9.4' Black silty sludge, somewhat soupy, slight ammonia odor, very soft, plastic.

9.4' - 9.6' Grey clay, some silt and fine sand, medium soft, plastic.

Comments: MS/MSD were collected at this location from 0' - 1'. Auger was very difficult to pull. Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-4	Sample Date:	4/8/2008 - 4/9/2008
Location:	See map	Sample Time SS:	1025 (4/9/2008)
Samplers:	GP/SM	Sample Time HP:	1015 (4/8/2008)
Weather:	Cool, breezy	Photo Numbers:	12-15

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 2.5' - 3.5'

Sample Depth HP: 8' - 8.8'

Sample Description:

Soft Sediment:

0'- 1.5' Black sludge, very fluid, very soft, organic odor.

1.5' - 6.5' Black sludge, soft, but slightly thicker than other AL2 locations, organic odor, plastic.

Hard Pack Sediment:

8' - 8.8' Black sludge w/some silt, soft, plastic, ammonia odor, some fibrous roots.

Comments: BD-2 collected at 2.5' - 3.5'.

Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-5	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	940
Samplers:	GP/SM	Sample Time HP:	820
Weather:	Cold, windy	Photo Numbers:	None

Sample Description

Sampling Equipment: Auger (HP), sediment sampler (SS)

Sample Depth SS: 0' - 1'

Sample Depth HP: 7.2' - 7.8'

Sample Description:

Soft Sediment:

0'-1.5' Black sludge, very soft, fluid, organic odor. Lower 5' of soft sediment lost during retrieval.

Hard Pack Sediment:

7.2' - 7.8' Black sludge, trace fines, slight odor, very soft, plastic.

7.8' - 8' Reddish-grey clay, sandy, fine grained, soft, plastic, no odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling. During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-1	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1825
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, windy	Photo Numbers:	None

Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.8' - 1.3'
Sample Depth HP:	X

Sample Description:

Soft Sediment:

0' - 0.8' Soupy black sludge, flows under own weight, slight green tint, strong manure smell, too soupy to sample.

0.8' - 1.6' Black sludge, thicker than above, still soupy, very soft, strong manure odor, almost fluid, green tint.

1.6' - 2.2' Black sludge, thicker than above, soft, clayey, less odor, no green, some silt/sand in lowest 2".

Hard Pack Sediment:

None.

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated steel pole.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-2	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1845
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, breezy	Photo Numbers:	None

Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.8' - 1.3'
Sample Depth HP:	X

Sample Description:

Soft Sediment:

0' - 0.8' Soupy black sludge, too thin to sample, flows under own weight, slight organic odor.

0.8' - 1.6' Black sludge, thicker than above, stays intact under own weight, some roots, slight odor, trace clayey, silty sand in lower 2", very soft.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated steel pole.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-3	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1815
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, very windy	Photo Numbers:	None

Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	1.2' - 1.7'
Sample Depth HP:	X

Sample Description:

Soft Sediment:

0' - 1.2' Soupy black sludge, fluid, organic odor, slightly thicker w/depth, flows under own weight

1.2' - 1.7' Black sludge, thicker than above, cohesive, remains intact under own weight, very soft, slightly clayey, organic odor, sandy & silty in lowest inch.

Hard Pack Sediment:

None.

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated steel pole.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-4	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1800
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, windy	Photo Numbers:	None

Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.8' - 1.3'
Sample Depth HP:	X

Sample Description:

Soft Sediment:

0' - 0.7' Soupy black sludge, fluid, too fluid in sample, organic odor, very soft.

0.7' - 1.3' Black sludge, very soft, cohesive, organic odor, slightly clayey.

1.3' - 1.5' SAA, some silt, sand, and gravel.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated steel pole.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-5	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1745
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, windy	Photo Numbers:	None

Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.8' - 1.3'
Sample Depth HP:	X

Sample Description:

Soft Sediment:

0' - 0.3' Black sludge, soupy, fluid, organic odor, very soft.

0.3' - 1.3' Black sludge, thicker, cohesive, organic odor, very soft, slightly clayey.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated steel pole.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-6	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1510
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, windy	Photo Numbers:	None

Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.5' - 1.0'
Sample Depth HP:	X

Sample Description:

Soft Sediment:

0' - 0.5' Soupy black sludge, very thin, too thin to sample, fluid, slight organic odor.

0.5' - 1.3' Soupy black sludge, slightly thicker than above, still flows under own weight, just thick enough to sample, slight organic odor.

1.3' - 1.5' Black sludge, clayey, silty, some fine sand, stays intact under own weight, soft, plastic, slight organic odor.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated steel pole.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-7	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1935
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, very windy	Photo Numbers:	None

Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.7' - 1.2'
Sample Depth HP:	X

Sample Description:

Soft Sediment:

0' - 0.7' Extremely soupy black sludge, very fluid, too thin to sample, slight organic odor.

0.7' - 1.2' Soupy black sludge, flows under own weight, slightly thicker than above, slight organic odor, no fines or sand.

Hard Pack Sediment:

None

Comments: May have lost a few inches out of core on retrieval.

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated steel pole.

Sediment Sampling Field Form

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-8	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1917
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, very windy	Photo Numbers:	None

Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	1.2' - 1.7'
Sample Depth HP:	X

Sample Description:

Soft Sediment:

0' - 0.8' Soupy black sludge, very thin, flows readily under own weight, too thin to sample, slight organic odor.

0.8' - 1.7' Soupy black sludge, slightly thicker than above, still flows under own weight, no fines or sand in lower portions as with most other EP1 samples, slight organic odor.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated steel pole.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Tuesday, April 29, 2008

Regina Allen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Evaporation Pond/Aeration Lagoon

Order No.: 0804138

Dear Regina Allen:

Hall Environmental Analysis Laboratory, Inc. received 34 sample(s) on 4/11/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

CASE NARRATIVE

"S" flags denote that the surrogate was not recoverable, or low, due to sample dilution and/or matrix interferences.

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-3
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	110000	5000		mg/Kg	50	4/16/2008 9:43:15 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/16/2008 9:43:15 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/16/2008 9:43:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/18/2008 4:08:55 AM
Surr: BFB	100	84-138		%REC	20	4/18/2008 4:08:55 AM
EPA METHOD 7471: MERCURY						Analyst: SNV
Mercury	5.1	1.6		mg/Kg	50	4/18/2008 4:31:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	6.5	2.5		mg/Kg	1	4/16/2008 8:17:06 AM
Barium	220	1.0		mg/Kg	10	4/16/2008 9:24:16 AM
Cadmium	0.43	0.10		mg/Kg	1	4/16/2008 8:17:06 AM
Chromium	13	0.30		mg/Kg	1	4/16/2008 8:17:06 AM
Lead	15	0.25		mg/Kg	1	4/16/2008 8:17:06 AM
Selenium	ND	25		mg/Kg	10	4/16/2008 9:24:16 AM
Silver	ND	0.25		mg/Kg	1	4/16/2008 8:17:06 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-3
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	ND	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	47	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	140	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	60	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	ND	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	130	30		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-3
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/17/2008
Pyrene	ND	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	53.6	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	65.7	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	86.3	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	41.9	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	81.0	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	70.0	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Toluene	0.68	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,2,4-Trimethylbenzene	1.2	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Naphthalene	1.3	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
1-Methylnaphthalene	4.9	2.0		mg/Kg	10	4/19/2008 1:50:50 PM
2-Methylnaphthalene	6.8	2.0		mg/Kg	10	4/19/2008 1:50:50 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 1:50:50 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 1:50:50 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 1:50:50 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-3
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 1:50:50 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 1:50:50 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 1:50:50 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM
Xylenes, Total	1.1	1.0		mg/Kg	10	4/19/2008 1:50:50 PM
Surr: 1,2-Dichloroethane-d4	94.3	68.7-122		%REC	10	4/19/2008 1:50:50 PM
Surr: 4-Bromofluorobenzene	89.3	79.3-126		%REC	10	4/19/2008 1:50:50 PM
Surr: Dibromofluoromethane	79.0	64.4-119		%REC	10	4/19/2008 1:50:50 PM
Surr: Toluene-d8	101	86.5-121		%REC	10	4/19/2008 1:50:50 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-4
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	130000	5000		mg/Kg	50	4/16/2008 10:17:20 PM
Motor Oil Range Organics (MRO)	27000	25000		mg/Kg	50	4/16/2008 10:17:20 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/16/2008 10:17:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/18/2008 4:38:57 AM
Surr: BFB	111	84-138		%REC	20	4/18/2008 4:38:57 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	9.6	1.6		mg/Kg	50	4/18/2008 4:33:14 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	26	2.5		mg/Kg	1	4/21/2008 9:26:55 AM
Barium	330	1.0		mg/Kg	10	4/21/2008 11:36:15 AM
Cadmium	6.4	0.10		mg/Kg	1	4/21/2008 9:26:55 AM
Chromium	41	0.30		mg/Kg	1	4/21/2008 9:26:55 AM
Lead	39	0.25		mg/Kg	1	4/28/2008 7:48:13 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 11:36:15 AM
Silver	ND	0.25		mg/Kg	1	4/21/2008 9:26:55 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-4
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	ND	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	59	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	180	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	86	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	ND	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	210	30		mg/Kg	1	4/17/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-4
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/17/2008
Pyrene	40	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	37.2	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	72.3	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	92.1	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	41.5	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	86.2	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	74.8	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Toluene	0.65	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2,4-Trimethylbenzene	1.3	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Naphthalene	1.7	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
1-Methylnaphthalene	6.0	2.0		mg/Kg	10	4/19/2008 2:26:21 PM
2-Methylnaphthalene	7.6	2.0		mg/Kg	10	4/19/2008 2:26:21 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 2:26:21 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 2:26:21 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 2:26:21 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT: Western Refining Southwest, Gallup
Lab Order: 0804138
Project: Evaporation Pond/Aeration Lagoon
Lab ID: 0804138-02

Client Sample ID: EP1-4
Collection Date: 4/9/2008 6:00:00 PM
Date Received: 4/11/2008
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: BDH
EPA METHOD 8260B: VOLATILES						
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 2:26:21 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 2:26:21 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 2:26:21 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Xylenes, Total	1.2	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
Surr: 1,2-Dichloroethane-d4	96.7	68.7-122		%REC	10	4/19/2008 2:26:21 PM
Surr: 4-Bromofluorobenzene	83.3	79.3-126		%REC	10	4/19/2008 2:26:21 PM
Surr: Dibromofluoromethane	86.8	64.4-119		%REC	10	4/19/2008 2:26:21 PM
Surr: Toluene-d8	96.4	86.5-121		%REC	10	4/19/2008 2:26:21 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-5
Lab Order:	0804138	**Collection Date:**	4/9/2008 5:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	120000	5000		mg/Kg	50	4/17/2008 12:33:47 AM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 12:33:47 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 12:33:47 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/18/2008 6:21:52 PM
Surr: BFB	110	84-138		%REC	20	4/18/2008 6:21:52 PM
EPA METHOD 7471: MERCURY						Analyst: SNV
Mercury	6.0	1.6		mg/Kg	50	4/18/2008 4:34:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	23	2.5		mg/Kg	1	4/21/2008 9:29:36 AM
Barium	150	1.0		mg/Kg	10	4/21/2008 11:38:54 AM
Cadmium	0.97	0.10		mg/Kg	1	4/21/2008 9:29:36 AM
Chromium	23	0.30		mg/Kg	1	4/21/2008 9:29:36 AM
Lead	22	0.25		mg/Kg	1	4/28/2008 7:50:47 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 11:38:54 AM
Silver	ND	0.25		mg/Kg	1	4/21/2008 9:29:36 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-5
Lab Order:	0804138	**Collection Date:**	4/9/2008 5:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	57	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	42	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	130	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	140	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	ND	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	150	30		mg/Kg	1	4/17/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-5
Lab Order:	0804138	**Collection Date:**	4/9/2008 5:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/17/2008
Pyrene	48	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	57.2	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	90.2	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	108	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	56.5	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	103	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	87.3	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Toluene	0.69	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2,4-Trimethylbenzene	1.5	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Naphthalene	1.9	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1-Methylnaphthalene	7.1	2.0		mg/Kg	10	4/19/2008 3:01:46 PM
2-Methylnaphthalene	10	2.0		mg/Kg	10	4/19/2008 3:01:46 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 3:01:46 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 3:01:46 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 3:01:46 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-5
Lab Order:	0804138	**Collection Date:**	4/9/2008 5:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 3:01:46 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 3:01:46 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 3:01:46 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Xylenes, Total	1.7	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
Surr: 1,2-Dichloroethane-d4	98.2	68.7-122		%REC	10	4/19/2008 3:01:46 PM
Surr: 4-Bromofluorobenzene	90.9	79.3-126		%REC	10	4/19/2008 3:01:46 PM
Surr: Dibromofluoromethane	93.2	64.4-119		%REC	10	4/19/2008 3:01:46 PM
Surr: Toluene-d8	96.1	86.5-121		%REC	10	4/19/2008 3:01:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-1-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 3:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	7.5		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	6.0		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	6.0		mg/Kg	1	4/17/2008
Chrysene	ND	6.0		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	15		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	6.0		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	6.0		mg/Kg	1	4/17/2008
Dibenzofuran	ND	6.0		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	6.0		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	6.0		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	6.0		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	7.5		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	6.0		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	6.0		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	6.0		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	9.0		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	15		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	15		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	15		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	15		mg/Kg	1	4/17/2008
Fluoranthene	ND	7.5		mg/Kg	1	4/17/2008
Fluorene	ND	6.0		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	6.0		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	6.0		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	6.0		mg/Kg	1	4/17/2008
Hexachloroethane	ND	6.0		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	7.5		mg/Kg	1	4/17/2008
Isophorone	ND	15		mg/Kg	1	4/17/2008
2-Methylnaphthalene	23	7.5		mg/Kg	1	4/17/2008
2-Methylphenol	ND	15		mg/Kg	1	4/17/2008
3+4-Methylphenol	6.2	6.0		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	6.0		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	6.0		mg/Kg	1	4/17/2008
Naphthalene	6.7	6.0		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	6.0		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	6.0		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	7.5		mg/Kg	1	4/17/2008
Nitrobenzene	ND	15		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	6.0		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	6.0		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	9.9		mg/Kg	1	4/17/2008
Phenanthrene	8.4	6.0		mg/Kg	1	4/17/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-1-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 3:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	6.7	6.0		mg/Kg	1	4/17/2008
Pyrene	ND	6.0		mg/Kg	1	4/17/2008
Pyridine	ND	15		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	6.0		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	6.0		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	6.0		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	74.0	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	89.4	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	95.4	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	53.7	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	91.2	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	79.0	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	1.2	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Toluene	6.8	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Ethylbenzene	2.9	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2,4-Trimethylbenzene	12	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,3,5-Trimethylbenzene	3.3	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Naphthalene	7.2	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1-Methylnaphthalene	15	2.0		mg/Kg	10	4/19/2008 3:37:14 PM
2-Methylnaphthalene	22	2.0		mg/Kg	10	4/19/2008 3:37:14 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 3:37:14 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 3:37:14 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 3:37:14 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-1-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 3:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 3:37:14 PM
Isopropylbenzene	0.72	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
4-Isopropyltoluene	0.54	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 3:37:14 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 3:37:14 PM
n-Butylbenzene	2.7	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
n-Propylbenzene	1.7	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
sec-Butylbenzene	0.96	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Xylenes, Total	18	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Surr: 1,2-Dichloroethane-d4	99.0	68.7-122		%REC	10	4/19/2008 3:37:14 PM
Surr: 4-Bromofluorobenzene	91.2	79.3-126		%REC	10	4/19/2008 3:37:14 PM
Surr: Dibromofluoromethane	88.5	64.4-119		%REC	10	4/19/2008 3:37:14 PM
Surr: Toluene-d8	97.1	86.5-121		%REC	10	4/19/2008 3:37:14 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-2-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 4:22:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	200000	5000		mg/Kg	50	4/17/2008 1:41:58 AM
Motor Oil Range Organics (MRO)	37000	25000		mg/Kg	50	4/17/2008 1:41:58 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 1:41:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	260	100		mg/Kg	20	4/18/2008 7:22:04 PM
Surr: BFB	109	84-138		%REC	20	4/18/2008 7:22:04 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	5.0	1.6		mg/Kg	50	4/18/2008 4:37:48 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	32	2.5		mg/Kg	1	4/21/2008 9:34:53 AM
Barium	350	1.0		mg/Kg	10	4/21/2008 11:44:13 AM
Cadmium	1.4	0.10		mg/Kg	1	4/21/2008 9:34:53 AM
Chromium	51	3.0		mg/Kg	10	4/21/2008 11:44:13 AM
Lead	110	2.5		mg/Kg	10	4/28/2008 8:38:04 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 11:44:13 AM
Silver	ND	0.25		mg/Kg	1	4/21/2008 9:34:53 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-2-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 4:22:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	34	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	40	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	260	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	98	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	65	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	140	30		mg/Kg	1	4/17/2008

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-2-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 4:22:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	54	30		mg/Kg	1	4/17/2008
Pyrene	ND	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	46.6	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	88.0	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	99.0	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	43.9	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	91.4	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	81.5	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	2.4	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Toluene	11	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Ethylbenzene	3.4	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2,4-Trimethylbenzene	10	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,3,5-Trimethylbenzene	2.8	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Naphthalene	6.5	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
1-Methylnaphthalene	14	2.0		mg/Kg	10	4/19/2008 4:12:55 PM
2-Methylnaphthalene	20	2.0		mg/Kg	10	4/19/2008 4:12:55 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 4:12:55 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 4:12:55 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 4:12:55 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-2-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 4:22:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 4:12:55 PM
Isopropylbenzene	0.58	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 4:12:55 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 4:12:55 PM
n-Butylbenzene	2.1	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
n-Propylbenzene	1.5	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
sec-Butylbenzene	0.80	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Xylenes, Total	20	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
Surr: 1,2-Dichloroethane-d4	94.9	68.7-122		%REC	10	4/19/2008 4:12:55 PM
Surr: 4-Bromofluorobenzene	97.8	79.3-126		%REC	10	4/19/2008 4:12:55 PM
Surr: Dibromofluoromethane	82.5	64.4-119		%REC	10	4/19/2008 4:12:55 PM
Surr: Toluene-d8	97.1	86.5-121		%REC	10	4/19/2008 4:12:55 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-3-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 2:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	110000	5000		mg/Kg	50	4/17/2008 2:16:06 AM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 2:16:06 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 2:16:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	150	100		mg/Kg	20	4/18/2008 10:22:51 PM
Surr: BFB	108	84-138		%REC	20	4/18/2008 10:22:51 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	6.7	1.6		mg/Kg	50	4/18/2008 4:39:22 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	11	2.5		mg/Kg	1	4/21/2008 9:37:31 AM
Barium	220	1.0		mg/Kg	10	4/21/2008 11:46:55 AM
Cadmium	0.12	0.10		mg/Kg	1	4/21/2008 9:37:31 AM
Chromium	16	0.30		mg/Kg	1	4/21/2008 9:37:31 AM
Lead	22	0.25		mg/Kg	1	4/28/2008 7:58:08 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 11:46:55 AM
Silver	ND	0.25		mg/Kg	1	4/21/2008 9:37:31 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-3-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 2:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	ND	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	40	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	200	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	36	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	100	30		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-3-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 2:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/17/2008
Pyrene	ND	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	54.8	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	83.8	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	94.0	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	36.5	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	90.2	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	70.1	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	2.0	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Toluene	7.0	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Ethylbenzene	1.9	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2,4-Trimethylbenzene	8.3	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,3,5-Trimethylbenzene	2.0	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Naphthalene	5.9	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
1-Methylnaphthalene	15	2.0		mg/Kg	10	4/19/2008 4:48:49 PM
2-Methylnaphthalene	20	2.0		mg/Kg	10	4/19/2008 4:48:49 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 4:48:49 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 4:48:49 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 4:48:49 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-3-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 2:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 4:48:49 PM
Isopropylbenzene	0.51	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
4-Isopropyltoluene	0.53	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 4:48:49 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 4:48:49 PM
n-Butylbenzene	2.1	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
n-Propylbenzene	1.2	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
sec-Butylbenzene	0.89	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Xylenes, Total	12	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Surr: 1,2-Dichloroethane-d4	95.0	68.7-122		%REC	10	4/19/2008 4:48:49 PM
Surr: 4-Bromofluorobenzene	96.8	79.3-126		%REC	10	4/19/2008 4:48:49 PM
Surr: Dibromofluoromethane	80.9	64.4-119		%REC	10	4/19/2008 4:48:49 PM
Surr: Toluene-d8	102	86.5-121		%REC	10	4/19/2008 4:48:49 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-4-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 10:50:00 AM
Project:	Evaporation Pond/Acration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-07	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	76000	5000		mg/Kg	50	4/17/2008 2:50:07 AM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 2:50:07 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 2:50:07 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	590	100		mg/Kg	20	4/18/2008 10:52:49 PM
Surr: BFB	120	84-138		%REC	20	4/18/2008 10:52:49 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	8.3	1.6		mg/Kg	50	4/18/2008 4:40:54 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	47	2.5		mg/Kg	1	4/21/2008 9:40:07 AM
Barium	310	1.0		mg/Kg	10	4/21/2008 11:49:37 AM
Cadmium	1.4	0.10		mg/Kg	1	4/21/2008 9:40:07 AM
Chromium	60	3.0		mg/Kg	10	4/21/2008 11:49:37 AM
Lead	220	2.5		mg/Kg	10	4/28/2008 8:40:06 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 11:49:37 AM
Silver	ND	0.25		mg/Kg	1	4/21/2008 9:40:07 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-4-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 10:50:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-07	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	31	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	340	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	90	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	84	30		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-4-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 10:50:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-07	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/17/2008
Pyrene	ND	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	59.3	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	91.2	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	94.5	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	43.9	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	88.0	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	75.7	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	3.2	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Toluene	22	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Ethylbenzene	11	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2,4-Trimethylbenzene	37	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,3,5-Trimethylbenzene	10	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Naphthalene	21	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1-Methylnaphthalene	29	2.0		mg/Kg	10	4/19/2008 5:24:28 PM
2-Methylnaphthalene	46	2.0		mg/Kg	10	4/19/2008 5:24:28 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 5:24:28 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 5:24:28 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 5:24:28 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-4-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 10:50:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-07	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 5:24:28 PM
Isopropylbenzene	1.6	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
4-Isopropyltoluene	0.84	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 5:24:28 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 5:24:28 PM
n-Butylbenzene	7.0	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
n-Propylbenzene	5.9	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
sec-Butylbenzene	1.8	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Xylenes, Total	60	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Surr: 1,2-Dichloroethane-d4	101	68.7-122		%REC	10	4/19/2008 5:24:28 PM
Surr: 4-Bromofluorobenzene	96.3	79.3-126		%REC	10	4/19/2008 5:24:28 PM
Surr: Dibromofluoromethane	85.6	64.4-119		%REC	10	4/19/2008 5:24:28 PM
Surr: Toluene-d8	93.8	86.5-121		%REC	10	4/19/2008 5:24:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-5-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 10:20:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	130000	5000		mg/Kg	50	4/17/2008 3:23:56 AM
Motor Oil Range Organics (MRO)	25000	25000		mg/Kg	50	4/17/2008 3:23:56 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 3:23:56 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	670	100		mg/Kg	20	4/18/2008 11:22:52 PM
Surr: BFB	112	84-138		%REC	20	4/18/2008 11:22:52 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	18	3.3		mg/Kg	100	4/18/2008 4:42:27 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	31	2.5		mg/Kg	1	4/21/2008 10:54:58 AM
Barium	450	1.0		mg/Kg	10	4/21/2008 11:52:18 AM
Cadmium	0.79	0.10		mg/Kg	1	4/21/2008 10:54:58 AM
Chromium	46	0.30		mg/Kg	1	4/21/2008 10:54:58 AM
Lead	110	2.5		mg/Kg	10	4/28/2008 8:44:11 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 11:52:18 AM
Silver	ND	0.25		mg/Kg	1	4/21/2008 10:54:58 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-5-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 10:20:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	ND	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	47	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	460	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	47	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	110	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	130	30		mg/Kg	1	4/17/2008

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-5-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 10:20:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/17/2008
Pyrene	ND	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	41.4	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	74.1	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	94.2	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	46.3	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	99.8	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	74.0	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	9.0	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Toluene	48	1.0		mg/Kg	20	4/21/2008 12:37:00 PM
Ethylbenzene	15	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Methyl tert-butyl ether (MTBE)	0.74	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,2,4-Trimethylbenzene	26	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,3,5-Trimethylbenzene	7.4	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Naphthalene	19	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
1-Methylnaphthalene	28	2.0		mg/Kg	10	4/19/2008 6:00:00 PM
2-Methylnaphthalene	42	2.0		mg/Kg	10	4/19/2008 6:00:00 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 6:00:00 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 6:00:00 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 6:00:00 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-5-HP
Lab Order:	0804138	**Collection Date:**	4/10/2008 10:20:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 6:00:00 PM
Isopropylbenzene	2.6	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
4-Isopropyltoluene	0.90	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 6:00:00 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 6:00:00 PM
n-Butylbenzene	4.9	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
n-Propylbenzene	4.8	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
sec-Butylbenzene	1.9	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 6:00:00 PM
Xylenes, Total	81	1.0		mg/Kg	10	4/19/2008 6:00:00 PM
Surr: 1,2-Dichloroethane-d4	97.9	68.7-122		%REC	10	4/19/2008 6:00:00 PM
Surr: 4-Bromofluorobenzene	101	79.3-126		%REC	20	4/21/2008 12:37:00 PM
Surr: Dibromofluoromethane	88.2	64.4-119		%REC	10	4/19/2008 6:00:00 PM
Surr: Toluene-d8	100	86.5-121		%REC	10	4/19/2008 6:00:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-1-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:10:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-09	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	71000	5000		mg/Kg	50	4/17/2008 3:57:41 AM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 3:57:41 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 3:57:41 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	300	250		mg/Kg	50	4/17/2008 2:36:15 PM
Surr: BFB	109	84-138		%REC	50	4/17/2008 2:36:15 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	19	3.3		mg/Kg	100	4/18/2008 4:44:01 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	29	2.5		mg/Kg	1	4/21/2008 10:57:35 AM
Barium	140	1.0		mg/Kg	10	4/21/2008 11:55:01 AM
Cadmium	0.64	0.10		mg/Kg	1	4/21/2008 10:57:35 AM
Chromium	44	0.30		mg/Kg	1	4/21/2008 10:57:35 AM
Lead	23	0.25		mg/Kg	1	4/28/2008 8:14:15 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 11:55:01 AM
Silver	ND	0.25		mg/Kg	1	4/21/2008 10:57:35 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-1-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:10:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-09	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	ND	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	190	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	53	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	50	30		mg/Kg	1	4/17/2008

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
	ND	Not Detected at the Reporting Limit	RL	Reporting Limit
	S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-1-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:10:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-09	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	34	30		mg/Kg	1	4/17/2008
Pyrene	ND	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	70.3	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	98.8	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	95.0	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	58.3	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	84.8	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	72.8	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	3.6	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Toluene	17	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Ethylbenzene	4.3	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,2,4-Trimethylbenzene	11	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,3,5-Trimethylbenzene	2.7	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Naphthalene	10	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
1-Methylnaphthalene	13	2.0		mg/Kg	10	4/19/2008 6:35:13 PM
2-Methylnaphthalene	21	2.0		mg/Kg	10	4/19/2008 6:35:13 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 6:35:13 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 6:35:13 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 6:35:13 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-1-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:10:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-09	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 6:35:13 PM
Isopropylbenzene	0.64	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 6:35:13 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 6:35:13 PM
n-Butylbenzene	0.65	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
n-Propylbenzene	1.4	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM
Xylenes, Total	27	1.0		mg/Kg	10	4/19/2008 6:35:13 PM
Surr: 1,2-Dichloroethane-d4	94.3	68.7-122		%REC	10	4/19/2008 6:35:13 PM
Surr: 4-Bromofluorobenzene	91.3	79.3-126		%REC	10	4/19/2008 6:35:13 PM
Surr: Dibromofluoromethane	97.5	64.4-119		%REC	10	4/19/2008 6:35:13 PM
Surr: Toluene-d8	98.8	86.5-121		%REC	10	4/19/2008 6:35:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-2-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-10	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	190000	5000		mg/Kg	50	4/17/2008 4:31:31 AM
Motor Oil Range Organics (MRO)	25000	25000		mg/Kg	50	4/17/2008 4:31:31 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 4:31:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	560	250		mg/Kg	50	4/17/2008 3:06:28 PM
Surr: BFB	115	84-138		%REC	50	4/17/2008 3:06:28 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	11	3.3		mg/Kg	100	4/18/2008 4:53:58 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	11	2.5		mg/Kg	1	4/21/2008 11:01:58 AM
Barium	190	1.0		mg/Kg	10	4/21/2008 12:06:58 PM
Cadmium	0.69	0.10		mg/Kg	1	4/21/2008 11:01:58 AM
Chromium	19	0.30		mg/Kg	1	4/21/2008 11:01:58 AM
Lead	79	2.5		mg/Kg	10	4/28/2008 8:46:35 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 12:06:58 PM
Silver	ND	0.25		mg/Kg	1	4/21/2008 11:01:58 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/17/2008
Acenaphthylene	ND	30		mg/Kg	1	4/17/2008
Aniline	ND	30		mg/Kg	1	4/17/2008
Anthracene	ND	30		mg/Kg	1	4/17/2008
Azobenzene	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/17/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/17/2008
Benzoic acid	ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/17/2008
Carbazole	ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-2-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-10	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene	ND	30		mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran	ND	30		mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/17/2008
Fluoranthene	ND	38		mg/Kg	1	4/17/2008
Fluorene	70	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/17/2008
Isophorone	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphthalene	460	38		mg/Kg	1	4/17/2008
2-Methylphenol	ND	75		mg/Kg	1	4/17/2008
3+4-Methylphenol	42	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/17/2008
Naphthalene	79	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	210	30		mg/Kg	1	4/17/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-2-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-10	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	35	30		mg/Kg	1	4/17/2008
Pyrene	39	30		mg/Kg	1	4/17/2008
Pyridine	ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tribromophenol	39.2	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluorobiphenyl	38.1	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluorophenol	90.5	28.1-129		%REC	1	4/17/2008
Surr: 4-Terphenyl-d14	38.1	34.6-151		%REC	1	4/17/2008
Surr: Nitrobenzene-d5	91.2	26.5-122		%REC	1	4/17/2008
Surr: Phenol-d5	71.3	37.6-118		%REC	1	4/17/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	5.1	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Toluene	32	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Ethylbenzene	10	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Methyl tert-butyl ether (MTBE)	1.1	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,2,4-Trimethylbenzene	26	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,3,5-Trimethylbenzene	6.7	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Naphthalene	19	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
1-Methylnaphthalene	42	2.0		mg/Kg	10	4/19/2008 7:10:34 PM
2-Methylnaphthalene	44	4.0		mg/Kg	20	4/21/2008 1:12:46 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 7:10:34 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 7:10:34 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 7:10:34 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-2-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-10	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 7:10:34 PM
Isopropylbenzene	1.8	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
4-Isopropyltoluene	1.0	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 7:10:34 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 7:10:34 PM
n-Butylbenzene	2.6	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
n-Propylbenzene	4.7	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
sec-Butylbenzene	1.9	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 7:10:34 PM
Xylenes, Total	56	1.0		mg/Kg	10	4/19/2008 7:10:34 PM
Surr: 1,2-Dichloroethane-d4	96.3	68.7-122		%REC	10	4/19/2008 7:10:34 PM
Surr: 4-Bromofluorobenzene	91.8	79.3-126		%REC	10	4/19/2008 7:10:34 PM
Surr: Dibromofluoromethane	99.9	64.4-119		%REC	10	4/19/2008 7:10:34 PM
Surr: Toluene-d8	92.2	86.5-121		%REC	10	4/19/2008 7:10:34 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-3-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-11	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	54000	5000		mg/Kg	50	4/17/2008 6:46:15 AM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 6:46:15 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 6:46:15 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	170	100		mg/Kg	20	4/18/2008 11:53:01 PM
Surr: BFB	112	84-138		%REC	20	4/18/2008 11:53:01 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	7.0	3.2		mg/Kg	100	4/18/2008 4:55:33 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	12	2.5		mg/Kg	1	4/21/2008 11:04:36 AM
Barium	210	1.0		mg/Kg	10	4/21/2008 12:11:18 PM
Cadmium	0.16	0.10		mg/Kg	1	4/21/2008 11:04:36 AM
Chromium	16	0.30		mg/Kg	1	4/21/2008 11:04:36 AM
Lead	25	0.25		mg/Kg	1	4/28/2008 8:19:16 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 12:11:18 PM
Silver	ND	0.25		mg/Kg	1	4/21/2008 11:04:36 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-3-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-11	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	ND	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	36	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	200	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	41	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	84	30		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-3-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-11	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	ND	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	58.2	35.5-141		%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	89.0	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	87.3	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	48.3	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	81.0	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	67.8	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	1.3	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Toluene	5.7	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Ethylbenzene	1.8	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,2,4-Trimethylbenzene	6.7	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,3,5-Trimethylbenzene	1.7	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Naphthalene	4.0	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
1-Methylnaphthalene	10	2.0		mg/Kg	10	4/19/2008 7:46:22 PM
2-Methylnaphthalene	15	2.0		mg/Kg	10	4/19/2008 7:46:22 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 7:46:22 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 7:46:22 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 7:46:22 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-3-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-11	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 7:46:22 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 7:46:22 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 7:46:22 PM
n-Butylbenzene	1.7	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
n-Propylbenzene	0.65	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
sec-Butylbenzene	0.82	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 7:46:22 PM
Xylenes, Total	12	1.0		mg/Kg	10	4/19/2008 7:46:22 PM
Surr: 1,2-Dichloroethane-d4	96.3	68.7-122		%REC	10	4/19/2008 7:46:22 PM
Surr: 4-Bromofluorobenzene	79.5	79.3-126		%REC	10	4/19/2008 7:46:22 PM
Surr: Dibromofluoromethane	93.9	64.4-119		%REC	10	4/19/2008 7:46:22 PM
Surr: Toluene-d8	96.6	86.5-121		%REC	10	4/19/2008 7:46:22 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-4-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-12	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	190000	5000		mg/Kg	50	4/17/2008 7:19:45 AM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 7:19:45 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 7:19:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	280	250		mg/Kg	50	4/17/2008 4:06:44 PM
Surr: BFB	112	84-138		%REC	50	4/17/2008 4:06:44 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	9.5	1.6		mg/Kg	50	4/18/2008 4:57:08 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	9.5	2.5		mg/Kg	1	4/21/2008 11:07:15 AM
Barium	280	1.0		mg/Kg	10	4/21/2008 12:13:56 PM
Cadmium	0.48	0.10		mg/Kg	1	4/21/2008 11:07:15 AM
Chromium	24	0.30		mg/Kg	1	4/21/2008 11:07:15 AM
Lead	38	0.25		mg/Kg	1	4/28/2008 8:21:47 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 12:13:56 PM
Silver	ND	0.25		mg/Kg	1	4/21/2008 11:07:15 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-4-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-12	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	33	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	91	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	530	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	94	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	200	30		mg/Kg	1	4/18/2008

Qualifiers:

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- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-4-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-12	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	44	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	34.3	35.5-141	S	%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	84.2	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	89.3	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	40.1	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	90.0	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	71.5	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	4.2	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Toluene	19	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Ethylbenzene	5.7	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2,4-Trimethylbenzene	18	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,3,5-Trimethylbenzene	4.1	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Naphthalene	14	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
1-Methylnaphthalene	28	2.0		mg/Kg	10	4/19/2008 8:21:47 PM
2-Methylnaphthalene	45	2.0		mg/Kg	10	4/19/2008 8:21:47 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 8:21:47 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 8:21:47 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 8:21:47 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-4-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 5:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-12	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 8:21:47 PM
Isopropylbenzene	0.79	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
4-Isopropyltoluene	0.56	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 8:21:47 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 8:21:47 PM
n-Butylbenzene	1.3	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
n-Propylbenzene	2.4	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
sec-Butylbenzene	1.3	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Xylenes, Total	33	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
Surr: 1,2-Dichloroethane-d4	94.2	68.7-122		%REC	10	4/19/2008 8:21:47 PM
Surr: 4-Bromofluorobenzene	84.0	79.3-126		%REC	10	4/19/2008 8:21:47 PM
Surr: Dibromofluoromethane	96.8	64.4-119		%REC	10	4/19/2008 8:21:47 PM
Surr: Toluene-d8	94.0	86.5-121		%REC	10	4/19/2008 8:21:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-5-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 6:00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-13	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	220000	5000		mg/Kg	50	4/17/2008 7:53:25 AM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 7:53:25 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 7:53:25 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	280	250		mg/Kg	50	4/17/2008 4:36:45 PM
Surr: BFB	117	84-138		%REC	50	4/17/2008 4:36:45 PM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	9.9	1.6		mg/Kg	50	4/28/2008 2:35:00 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	12	2.5		mg/Kg	1	4/21/2008 11:09:54 AM
Barium	360	1.0		mg/Kg	10	4/21/2008 12:16:35 PM
Cadmium	0.20	0.10		mg/Kg	1	4/21/2008 11:09:54 AM
Chromium	13	0.30		mg/Kg	1	4/21/2008 11:09:54 AM
Lead	30	0.25		mg/Kg	1	4/28/2008 8:24:19 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 12:16:35 PM
Silver	ND	0.25		mg/Kg	1	4/21/2008 11:09:54 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-5-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 6:00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-13	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	ND	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	84	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	600	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	110	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	220	30		mg/Kg	1	4/18/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-5-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 6:00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-13	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	ND	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	21.9	35.5-141	S	%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	68.1	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	79.4	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	33.5	34.6-151	S	%REC	1	4/18/2008
Surr: Nitrobenzene-d5	98.4	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	62.6	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	5.9	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Toluene	24	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Ethylbenzene	6.1	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Methyl tert-butyl ether (MTBE)	1.1	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,2,4-Trimethylbenzene	16	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,3,5-Trimethylbenzene	4.0	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Naphthalene	14	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
1-Methylnaphthalene	29	2.0		mg/Kg	10	4/19/2008 10:43:34 PM
2-Methylnaphthalene	43	2.0		mg/Kg	10	4/19/2008 10:43:34 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 10:43:34 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 10:43:34 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 10:43:34 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL1-5-SS
Lab Order:	0804138	**Collection Date:**	4/10/2008 6:00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-13	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 10:43:34 PM
Isopropylbenzene	1.2	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
4-Isopropyltoluene	0.71	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 10:43:34 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 10:43:34 PM
n-Butylbenzene	3.0	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
n-Propylbenzene	2.5	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
sec-Butylbenzene	1.2	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM
Xylenes, Total	35	1.0		mg/Kg	10	4/19/2008 10:43:34 PM
Surr: 1,2-Dichloroethane-d4	95.9	68.7-122		%REC	10	4/19/2008 10:43:34 PM
Surr: 4-Bromofluorobenzene	85.8	79.3-126		%REC	10	4/19/2008 10:43:34 PM
Surr: Dibromofluoromethane	99.9	64.4-119		%REC	10	4/19/2008 10:43:34 PM
Surr: Toluene-d8	97.7	86.5-121		%REC	10	4/19/2008 10:43:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-6
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:10:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-14	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	180000	5000		mg/Kg	50	4/17/2008 8:27:16 AM
Motor Oil Range Organics (MRO)	26000	25000		mg/Kg	50	4/17/2008 8:27:16 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 8:27:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 12:23:11 AM
Surr: BFB	108	84-138		%REC	20	4/19/2008 12:23:11 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	4.1	1.6		mg/Kg	50	4/28/2008 2:38:12 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	3.2	2.5		mg/Kg	1	4/21/2008 11:12:34 AM
Barium	330	1.0		mg/Kg	10	4/21/2008 12:19:14 PM
Cadmium	0.26	0.10		mg/Kg	1	4/21/2008 11:12:34 AM
Chromium	8.8	0.30		mg/Kg	1	4/21/2008 11:12:34 AM
Lead	16	0.25		mg/Kg	1	4/28/2008 8:26:49 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 12:19:14 PM
Silver	ND	0.25		mg/Kg	1	4/21/2008 11:12:34 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-6
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:10:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-14	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	40	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	70	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	210	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	ND	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	150	30		mg/Kg	1	4/18/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-6
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:10:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-14	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	41	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	39.8	35.5-141		%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	81.0	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	87.3	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	47.1	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	63.5	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	65.5	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Toluene	0.63	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,2,4-Trimethylbenzene	2.2	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Naphthalene	2.8	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
1-Methylnaphthalene	15	2.0		mg/Kg	10	4/19/2008 11:18:48 PM
2-Methylnaphthalene	19	2.0		mg/Kg	10	4/19/2008 11:18:48 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 11:18:48 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 11:18:48 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 11:18:48 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-6
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:10:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-14	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 11:18:48 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 11:18:48 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 11:18:48 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM
Xylenes, Total	1.3	1.0		mg/Kg	10	4/19/2008 11:18:48 PM
Surr: 1,2-Dichloroethane-d4	98.2	68.7-122		%REC	10	4/19/2008 11:18:48 PM
Surr: 4-Bromofluorobenzene	92.6	79.3-126		%REC	10	4/19/2008 11:18:48 PM
Surr: Dibromofluoromethane	99.2	64.4-119		%REC	10	4/19/2008 11:18:48 PM
Surr: Toluene-d8	97.7	86.5-121		%REC	10	4/19/2008 11:18:48 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-7
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-15	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	200000	5000		mg/Kg	50	4/17/2008 9:01:21 AM
Motor Oil Range Organics (MRO)	25000	25000		mg/Kg	50	4/17/2008 9:01:21 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 9:01:21 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 12:53:17 AM
Surr: BFB	102	84-138		%REC	20	4/19/2008 12:53:17 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	4.4	1.6		mg/Kg	50	4/28/2008 2:41:25 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	3.6	2.5		mg/Kg	1	4/21/2008 11:15:14 AM
Barium	280	1.0		mg/Kg	10	4/21/2008 12:21:53 PM
Cadmium	0.27	0.10		mg/Kg	1	4/21/2008 11:15:14 AM
Chromium	8.3	0.30		mg/Kg	1	4/21/2008 11:15:14 AM
Lead	9.7	0.25		mg/Kg	1	4/28/2008 8:29:20 AM
Selenium	27	25		mg/Kg	10	4/21/2008 12:21:53 PM
Silver	ND	0.25		mg/Kg	1	4/21/2008 11:15:14 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	35	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	60		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-7
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-15	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	74	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	77	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	260	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	ND	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	60		mg/Kg	1	4/18/2008
Phenanthrene	240	30		mg/Kg	1	4/18/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-7
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-15	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	70	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	33.5	35.5-141	S	%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	82.2	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	88.1	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	39.7	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	62.9	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	60.7	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Toluene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,2,4-Trimethylbenzene	1.7	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Naphthalene	1.7	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
1-Methylnaphthalene	9.1	2.0		mg/Kg	10	4/19/2008 11:54:29 PM
2-Methylnaphthalene	12	2.0		mg/Kg	10	4/19/2008 11:54:29 PM
Acetone	ND	7.5		mg/Kg	10	4/19/2008 11:54:29 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Bromoform	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Bromomethane	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
2-Butanone	ND	5.0		mg/Kg	10	4/19/2008 11:54:29 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/19/2008 11:54:29 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Chloroethane	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
Chloroform	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Chloromethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-7
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-15	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 11:54:29 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 11:54:29 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 11:54:29 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM
Xylenes, Total	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM
Surr: 1,2-Dichloroethane-d4	97.2	68.7-122		%REC	10	4/19/2008 11:54:29 PM
Surr: 4-Bromofluorobenzene	91.1	79.3-126		%REC	10	4/19/2008 11:54:29 PM
Surr: Dibromofluoromethane	103	64.4-119		%REC	10	4/19/2008 11:54:29 PM
Surr: Toluene-d8	98.2	86.5-121		%REC	10	4/19/2008 11:54:29 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-8
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:17:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-16	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	150000	5000		mg/Kg	50	4/17/2008 9:35:41 AM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 9:35:41 AM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 9:35:41 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 1:23:23 AM
Surr: BFB	108	84-138		%REC	20	4/19/2008 1:23:23 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	4.9	1.6		mg/Kg	50	4/28/2008 2:44:40 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	11	2.5		mg/Kg	1	4/21/2008 11:17:52 AM
Barium	120	1.0		mg/Kg	10	4/21/2008 12:24:33 PM
Cadmium	0.80	0.10		mg/Kg	1	4/21/2008 11:17:52 AM
Chromium	58	3.0		mg/Kg	10	4/21/2008 12:24:33 PM
Lead	15	0.25		mg/Kg	1	4/28/2008 8:31:51 AM
Selenium	ND	25		mg/Kg	10	4/21/2008 12:24:33 PM
Silver	ND	0.25		mg/Kg	1	4/21/2008 11:17:52 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-8
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:17:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-16	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	ND	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	41	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	110	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	ND	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	120	30		mg/Kg	1	4/18/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-8
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:17:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-16	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	ND	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	49.2	35.5-141		%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	84.2	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	86.1	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	47.3	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	62.5	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	66.3	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Toluene	0.54	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,2,4-Trimethylbenzene	1.2	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Naphthalene	1.6	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
1-Methylnaphthalene	8.1	2.0		mg/Kg	10	4/20/2008 12:29:39 AM
2-Methylnaphthalene	11	2.0		mg/Kg	10	4/20/2008 12:29:39 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 12:29:39 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 12:29:39 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 12:29:39 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-8
Lab Order:	0804138	**Collection Date:**	4/9/2008 7:17:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-16	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 12:29:39 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 12:29:39 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 12:29:39 AM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM
Xylenes, Total	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM
Surr: 1,2-Dichloroethane-d4	96.9	68.7-122		%REC	10	4/20/2008 12:29:39 AM
Surr: 4-Bromofluorobenzene	90.7	79.3-126		%REC	10	4/20/2008 12:29:39 AM
Surr: Dibromofluoromethane	96.4	64.4-119		%REC	10	4/20/2008 12:29:39 AM
Surr: Toluene-d8	99.8	86.5-121		%REC	10	4/20/2008 12:29:39 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-2
Lab Order:	0804138	**Collection Date:**	4/9/2008
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-19	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	350000	5000		mg/Kg	50	4/17/2008 5:27:25 PM
Motor Oil Range Organics (MRO)	52000	25000		mg/Kg	50	4/17/2008 5:27:25 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 5:27:25 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 1:53:15 AM
Surr: BFB	103	84-138		%REC	20	4/19/2008 1:53:15 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	5.5	1.6		mg/Kg	50	4/28/2008 2:51:14 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	14	2.5		mg/Kg	1	4/23/2008 8:07:03 AM
Barium	210	1.0		mg/Kg	10	4/23/2008 9:21:38 AM
Cadmium	0.40	0.10		mg/Kg	1	4/23/2008 8:07:03 AM
Chromium	16	0.30		mg/Kg	1	4/23/2008 8:07:03 AM
Lead	29	0.25		mg/Kg	1	4/28/2008 9:36:28 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:21:38 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 9:36:28 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-2
Lab Order:	0804138	**Collection Date:**	4/9/2008
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-19	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	49	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	36	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	130	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	640	75		mg/Kg	2	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	35	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	67	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	310	30		mg/Kg	1	4/18/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-2
Lab Order:	0804138	**Collection Date:**	4/9/2008
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-19	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	51	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	19.9	35.5-141	S	%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	0	30.4-128	S	%REC	1	4/18/2008
Surr: 2-Fluorophenol	83.7	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	45.1	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	84.4	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	66.9	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Toluene	1.2	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2,4-Trimethylbenzene	3.6	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,3,5-Trimethylbenzene	0.56	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Naphthalene	4.1	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1-Methylnaphthalene	21	2.0		mg/Kg	10	4/20/2008 1:05:19 AM
2-Methylnaphthalene	24	2.0		mg/Kg	10	4/20/2008 1:05:19 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 1:05:19 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 1:05:19 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 1:05:19 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-2
Lab Order:	0804138	**Collection Date:**	4/9/2008
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-19	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 1:05:19 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 1:05:19 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 1:05:19 AM
n-Butylbenzene	0.72	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Xylenes, Total	3.1	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
Surr: 1,2-Dichloroethane-d4	98.6	68.7-122		%REC	10	4/20/2008 1:05:19 AM
Surr: 4-Bromofluorobenzene	93.1	79.3-126		%REC	10	4/20/2008 1:05:19 AM
Surr: Dibromofluoromethane	105	64.4-119		%REC	10	4/20/2008 1:05:19 AM
Surr: Toluene-d8	101	86.5-121		%REC	10	4/20/2008 1:05:19 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-1
Lab Order:	0804138	**Collection Date:**	4/8/2008
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-20	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	220000	5000		mg/Kg	50	4/18/2008 11:41:56 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/18/2008 11:41:56 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/18/2008 11:41:56 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 2:23:16 AM
Surr: BFB	109	84-138		%REC	20	4/19/2008 2:23:16 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	11	1.6		mg/Kg	50	4/28/2008 2:54:28 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	12	2.5		mg/Kg	1	4/23/2008 8:09:42 AM
Barium	420	1.0		mg/Kg	10	4/23/2008 9:24:19 AM
Cadmium	0.46	0.10		mg/Kg	1	4/23/2008 8:09:42 AM
Chromium	22	0.30		mg/Kg	1	4/23/2008 8:09:42 AM
Lead	26	0.25		mg/Kg	1	4/28/2008 9:39:06 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:24:19 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 9:39:06 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-1
Lab Order:	0804138	**Collection Date:**	4/8/2008
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-20	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	48	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	100	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	540	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	30	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	48	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	300	30		mg/Kg	1	4/18/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-1
Lab Order:	0804138	**Collection Date:**	4/8/2008
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-20	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	56	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	30.1	35.5-141	S	%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	73.9	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	89.8	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	35.9	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	81.0	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	66.8	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Toluene	1.3	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2,4-Trimethylbenzene	2.9	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,3,5-Trimethylbenzene	0.61	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Naphthalene	5.1	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
1-Methylnaphthalene	23	2.0		mg/Kg	10	4/20/2008 1:40:28 AM
2-Methylnaphthalene	34	2.0		mg/Kg	10	4/20/2008 1:40:28 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 1:40:28 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 1:40:28 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 1:40:28 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-1
Lab Order:	0804138	**Collection Date:**	4/8/2008
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-20	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 1:40:28 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 1:40:28 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 1:40:28 AM
n-Butylbenzene	0.65	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Xylenes, Total	3.1	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
Surr: 1,2-Dichloroethane-d4	94.0	68.7-122		%REC	10	4/20/2008 1:40:28 AM
Surr: 4-Bromofluorobenzene	94.4	79.3-126		%REC	10	4/20/2008 1:40:28 AM
Surr: Dibromofluoromethane	99.4	84.4-119		%REC	10	4/20/2008 1:40:28 AM
Surr: Toluene-d8	95.0	86.5-121		%REC	10	4/20/2008 1:40:28 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EB040808
Lab Order:	0804138	**Collection Date:**	4/8/2008 4:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-21	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Toluene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Ethylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Naphthalene	ND	2.0		µg/L	1	4/19/2008 12:33:24 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 12:33:24 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 12:33:24 PM
Acetone	ND	10		µg/L	1	4/19/2008 12:33:24 PM
Bromobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Bromoform	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Bromomethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
2-Butanone	ND	10		µg/L	1	4/19/2008 12:33:24 PM
Carbon disulfide	ND	10		µg/L	1	4/19/2008 12:33:24 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Chlorobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Chloroethane	ND	2.0		µg/L	1	4/19/2008 12:33:24 PM
Chloroform	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Chloromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/19/2008 12:33:24 PM
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Dibromomethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/19/2008 12:33:24 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
2-Hexanone	ND	10		µg/L	1	4/19/2008 12:33:24 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EB040808
Lab Order:	0804138	**Collection Date:**	4/8/2008 4:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-21	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2008 12:33:24 PM
Methylene Chloride	ND	3.0		µg/L	1	4/19/2008 12:33:24 PM
n-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
n-Propylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
sec-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Styrene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
tert-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/19/2008 12:33:24 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
trans-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/19/2008 12:33:24 PM
Vinyl chloride	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Xylenes, Total	ND	1.5		µg/L	1	4/19/2008 12:33:24 PM
Surr: 1,2-Dichloroethane-d4	108	68.1-123		%REC	1	4/19/2008 12:33:24 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	1	4/19/2008 12:33:24 PM
Surr: Dibromofluoromethane	101	68.5-119		%REC	1	4/19/2008 12:33:24 PM
Surr: Toluene-d8	104	64-131		%REC	1	4/19/2008 12:33:24 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EB040908
Lab Order:	0804138	**Collection Date:**	4/10/2008 7:35:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-22	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Toluene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Ethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Naphthalene	ND	2.0		µg/L	1	4/19/2008 1:02:11 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 1:02:11 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 1:02:11 PM
Acetone	ND	10		µg/L	1	4/19/2008 1:02:11 PM
Bromobenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Bromoform	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Bromomethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
2-Butanone	ND	10		µg/L	1	4/19/2008 1:02:11 PM
Carbon disulfide	ND	10		µg/L	1	4/19/2008 1:02:11 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Chlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Chloroethane	ND	2.0		µg/L	1	4/19/2008 1:02:11 PM
Chloroform	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Chloromethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/19/2008 1:02:11 PM
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Dibromomethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/19/2008 1:02:11 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
2-Hexanone	ND	10		µg/L	1	4/19/2008 1:02:11 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EB040908
Lab Order:	0804138	**Collection Date:**	4/10/2008 7:35:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-22	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2008 1:02:11 PM
Methylene Chloride	ND	3.0		µg/L	1	4/19/2008 1:02:11 PM
n-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
n-Propylbenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
sec-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Styrene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
tert-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/19/2008 1:02:11 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
trans-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/19/2008 1:02:11 PM
Vinyl chloride	ND	1.0		µg/L	1	4/19/2008 1:02:11 PM
Xylenes, Total	ND	1.5		µg/L	1	4/19/2008 1:02:11 PM
Surr: 1,2-Dichloroethane-d4	110	68.1-123		%REC	1	4/19/2008 1:02:11 PM
Surr: 4-Bromofluorobenzene	101	53.2-145		%REC	1	4/19/2008 1:02:11 PM
Surr: Dibromofluoromethane	99.7	68.5-119		%REC	1	4/19/2008 1:02:11 PM
Surr: Toluene-d8	97.9	64-131		%REC	1	4/19/2008 1:02:11 PM

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
	ND	Not Detected at the Reporting Limit	RL	Reporting Limit
	S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EB041008
Lab Order:	0804138	**Collection Date:**	4/11/2008 8:35:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-23	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Toluene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Ethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Naphthalene	ND	2.0		µg/L	1	4/19/2008 1:31:01 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 1:31:01 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 1:31:01 PM
Acetone	ND	10		µg/L	1	4/19/2008 1:31:01 PM
Bromobenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Bromoform	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Bromomethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
2-Butanone	ND	10		µg/L	1	4/19/2008 1:31:01 PM
Carbon disulfide	ND	10		µg/L	1	4/19/2008 1:31:01 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Chlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Chloroethane	ND	2.0		µg/L	1	4/19/2008 1:31:01 PM
Chloroform	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Chloromethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/19/2008 1:31:01 PM
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Dibromomethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/19/2008 1:31:01 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
2-Hexanone	ND	10		µg/L	1	4/19/2008 1:31:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EB041008
Lab Order:	0804138	**Collection Date:**	4/11/2008 8:35:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-23	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2008 1:31:01 PM
Methylene Chloride	ND	3.0		µg/L	1	4/19/2008 1:31:01 PM
n-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
n-Propylbenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
sec-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Styrene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
tert-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/19/2008 1:31:01 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
trans-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/19/2008 1:31:01 PM
Vinyl chloride	ND	1.0		µg/L	1	4/19/2008 1:31:01 PM
Xylenes, Total	ND	1.5		µg/L	1	4/19/2008 1:31:01 PM
Surr: 1,2-Dichloroethane-d4	110	68.1-123		%REC	1	4/19/2008 1:31:01 PM
Surr: 4-Bromofluorobenzene	106	53.2-145		%REC	1	4/19/2008 1:31:01 PM
Surr: Dibromofluoromethane	95.8	68.5-119		%REC	1	4/19/2008 1:31:01 PM
Surr: Toluene-d8	98.6	64-131		%REC	1	4/19/2008 1:31:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	Trip Blank
Lab Order:	0804138	**Collection Date:**	
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-24	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Toluene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Ethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Naphthalene	ND	2.0		µg/L	1	4/19/2008 1:59:54 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 1:59:54 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 1:59:54 PM
Acetone	ND	10		µg/L	1	4/19/2008 1:59:54 PM
Bromobenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Bromoform	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Bromomethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
2-Butanone	ND	10		µg/L	1	4/19/2008 1:59:54 PM
Carbon disulfide	ND	10		µg/L	1	4/19/2008 1:59:54 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Chlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Chloroethane	ND	2.0		µg/L	1	4/19/2008 1:59:54 PM
Chloroform	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Chloromethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/19/2008 1:59:54 PM
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Dibromomethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/19/2008 1:59:54 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
2-Hexanone	ND	10		µg/L	1	4/19/2008 1:59:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	Trip Blank
Lab Order:	0804138	**Collection Date:**	
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-24	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2008 1:59:54 PM
Methylene Chloride	ND	3.0		µg/L	1	4/19/2008 1:59:54 PM
n-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
n-Propylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
sec-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Styrene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
tert-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/19/2008 1:59:54 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
trans-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/19/2008 1:59:54 PM
Vinyl chloride	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
Xylenes, Total	ND	1.5		µg/L	1	4/19/2008 1:59:54 PM
Surr: 1,2-Dichloroethane-d4	109	68.1-123		%REC	1	4/19/2008 1:59:54 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	1	4/19/2008 1:59:54 PM
Surr: Dibromofluoromethane	101	68.5-119		%REC	1	4/19/2008 1:59:54 PM
Surr: Toluene-d8	100	64-131		%REC	1	4/19/2008 1:59:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-1-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 11:05:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-25	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	120000	5000		mg/Kg	50	4/17/2008 12:54:40 PM
Motor Oil Range Organics (MRO)	28000	25000		mg/Kg	50	4/17/2008 12:54:40 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 12:54:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 2:53:20 AM
Surr: BFB	98.4	84-138		%REC	20	4/19/2008 2:53:20 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	7.4	1.6		mg/Kg	50	4/28/2008 2:57:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	18	2.5		mg/Kg	1	4/23/2008 8:12:22 AM
Barium	81	0.20		mg/Kg	2	4/23/2008 9:27:00 AM
Cadmium	2.4	0.10		mg/Kg	1	4/23/2008 8:12:22 AM
Chromium	29	0.30		mg/Kg	1	4/23/2008 8:12:22 AM
Lead	32	0.25		mg/Kg	1	4/28/2008 9:41:37 AM
Selenium	ND	5.0		mg/Kg	2	4/23/2008 9:27:00 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 9:41:37 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-1-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 11:05:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-25	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	42	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	99	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	ND	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	50	30		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-1-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 11:05:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-25	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	38	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	56.9	35.5-141		%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	81.4	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	89.5	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	52.3	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	60.9	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	69.9	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Toluene	0.60	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,2,4-Trimethylbenzene	0.93	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Naphthalene	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
1-Methylnaphthalene	2.5	2.0		mg/Kg	10	4/20/2008 4:02:15 AM
2-Methylnaphthalene	2.4	2.0		mg/Kg	10	4/20/2008 4:02:15 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 4:02:15 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 4:02:15 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 4:02:15 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-1-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 11:05:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-25	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 4:02:15 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 4:02:15 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 4:02:15 AM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM
Xylenes, Total	1.9	1.0		mg/Kg	10	4/20/2008 4:02:15 AM
Surr: 1,2-Dichloroethane-d4	95.6	66.7-122		%REC	10	4/20/2008 4:02:15 AM
Surr: 4-Bromofluorobenzene	94.9	79.3-126		%REC	10	4/20/2008 4:02:15 AM
Surr: Dibromofluoromethane	96.1	64.4-119		%REC	10	4/20/2008 4:02:15 AM
Surr: Toluene-d8	101	86.5-121		%REC	10	4/20/2008 4:02:15 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-2-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 3:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-26	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	130000	5000		mg/Kg	50	4/17/2008 1:28:44 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 1:28:44 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 1:28:44 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 3:23:21 AM
Surr: BFB	104	84-138		%REC	20	4/19/2008 3:23:21 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	6.4	1.6		mg/Kg	50	4/28/2008 3:00:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	20	2.6		mg/Kg	1	4/23/2008 8:15:00 AM
Barium	300	1.0		mg/Kg	10	4/23/2008 9:29:41 AM
Cadmium	0.73	0.10		mg/Kg	1	4/23/2008 8:15:00 AM
Chromium	22	0.30		mg/Kg	1	4/23/2008 8:15:00 AM
Lead	39	0.25		mg/Kg	1	4/28/2008 9:44:15 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:29:41 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 9:44:15 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-2-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 3:15:00 PM
Project:	Evaporation Pond/Acration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-26	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	ND	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	36	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	140	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	36	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	ND	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	93	30		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT: Western Refining Southwest, Gallup
Lab Order: 0804138
Project: Evaporation Pond/Aeration Lagoon
Lab ID: 0804138-26

Client Sample ID: AL2-2-HP
Collection Date: 4/8/2008 3:15:00 PM
Date Received: 4/11/2008
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	ND	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	52.0	35.5-141		%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	79.6	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	94.1	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	45.5	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	72.9	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	69.5	37.8-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Toluene	1.1	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,2,4-Trimethylbenzene	3.0	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,3,5-Trimethylbenzene	0.71	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Naphthalene	3.2	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
1-Methylnaphthalene	11	2.0		mg/Kg	10	4/20/2008 4:37:50 AM
2-Methylnaphthalene	15	2.0		mg/Kg	10	4/20/2008 4:37:50 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 4:37:50 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 4:37:50 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 4:37:50 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-2-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 3:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-26	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 4:37:50 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 4:37:50 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 4:37:50 AM
n-Butylbenzene	0.56	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 4:37:50 AM
Xylenes, Total	3.8	1.0		mg/Kg	10	4/20/2008 4:37:50 AM
Surr: 1,2-Dichloroethane-d4	96.2	68.7-122		%REC	10	4/20/2008 4:37:50 AM
Surr: 4-Bromofluorobenzene	89.8	79.3-126		%REC	10	4/20/2008 4:37:50 AM
Surr: Dibromofluoromethane	99.7	64.4-119		%REC	10	4/20/2008 4:37:50 AM
Surr: Toluene-d8	97.3	86.5-121		%REC	10	4/20/2008 4:37:50 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-3-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 12:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-27	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	110000	5000		mg/Kg	50	4/17/2008 2:02:53 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 2:02:53 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 2:02:53 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 3:53:29 AM
Surr: BFB	105	84-138		%REC	20	4/19/2008 3:53:29 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	2.1	1.6		mg/Kg	50	4/28/2008 3:04:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	9.8	2.5		mg/Kg	1	4/23/2008 8:17:38 AM
Barium	280	1.0		mg/Kg	10	4/23/2008 9:38:38 AM
Cadmium	0.26	0.10		mg/Kg	1	4/23/2008 8:17:38 AM
Chromium	15	0.30		mg/Kg	1	4/23/2008 8:17:38 AM
Lead	12	0.25		mg/Kg	1	4/28/2008 9:46:47 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:38:38 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 9:46:47 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-3-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 12:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-27	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	ND	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	32	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	110	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	44	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	ND	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	89	30		mg/Kg	1	4/18/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-3-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 12:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-27	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/18/2008
Pyrene	ND	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	47.4	35.5-141		%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	72.3	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	84.8	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	65.5	34.6-161		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	62.5	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	70.2	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Toluene	0.53	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Ethylbenzene	0.62	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,2,4-Trimethylbenzene	3.8	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,3,5-Trimethylbenzene	0.87	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Naphthalene	3.4	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
1-Methylnaphthalene	12	2.0		mg/Kg	10	4/20/2008 5:12:55 AM
2-Methylnaphthalene	17	2.0		mg/Kg	10	4/20/2008 5:12:55 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 5:12:55 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 5:12:55 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 5:12:55 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-3-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 12:15:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-27	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 5:12:55 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 5:12:55 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 5:12:55 AM
n-Butylbenzene	0.89	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 5:12:55 AM
Xylenes, Total	4.3	1.0		mg/Kg	10	4/20/2008 5:12:55 AM
Surr: 1,2-Dichloroethane-d4	95.4	68.7-122		%REC	10	4/20/2008 5:12:55 AM
Surr: 4-Bromofluorobenzene	84.0	79.3-126		%REC	10	4/20/2008 5:12:55 AM
Surr: Dibromofluoromethane	103	64.4-119		%REC	10	4/20/2008 5:12:55 AM
Surr: Toluene-d8	92.9	86.5-121		%REC	10	4/20/2008 5:12:55 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT: Western Refining Southwest, Gallup
Lab Order: 0804138
Project: Evaporation Pond/Aeration Lagoon
Lab ID: 0804138-28

Client Sample ID: AL2-4-HP
Collection Date: 4/8/2008 10:15:00 AM
Date Received: 4/11/2008
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	140000	5000		mg/Kg	50	4/17/2008 2:36:57 PM
Motor Oil Range Organics (MRO)	29000	25000		mg/Kg	50	4/17/2008 2:36:57 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 2:36:57 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 4:23:35 AM
Surr: BFB	104	84-138		%REC	20	4/19/2008 4:23:35 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	6.4	1.6		mg/Kg	50	4/28/2008 3:10:53 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	21	2.5		mg/Kg	1	4/23/2008 8:20:15 AM
Barium	270	1.0		mg/Kg	10	4/23/2008 9:41:16 AM
Cadmium	5.2	0.10		mg/Kg	1	4/23/2008 8:20:15 AM
Chromium	45	0.30		mg/Kg	1	4/23/2008 8:20:15 AM
Lead	55	2.5		mg/Kg	10	4/28/2008 11:27:26 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:41:16 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 9:49:16 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	ND	30		mg/Kg	1	4/18/2008
Aniline	ND	30		mg/Kg	1	4/18/2008
Anthracene	ND	30		mg/Kg	1	4/18/2008
Azobenzene	ND	30		mg/Kg	1	4/18/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/18/2008
Benzoic acid	ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/18/2008
Carbazole	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/18/2008

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-4-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 10:15:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-28	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene	ND	30		mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	ND	30		mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	4/18/2008
Fluorene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	57	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	100	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/18/2008
Naphthalene	ND	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/18/2008
Nitrobenzene	ND	75		mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/18/2008
Phenanthrene	55	30		mg/Kg	1	4/18/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-4-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 10:15:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-28	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	43	30		mg/Kg	1	4/18/2008
Pyrene	ND	30		mg/Kg	1	4/18/2008
Pyridine	ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tribromophenol	56.1	35.5-141		%REC	1	4/18/2008
Surr: 2-Fluorobiphenyl	86.0	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluorophenol	90.9	28.1-129		%REC	1	4/18/2008
Surr: 4-Terphenyl-d14	55.1	34.6-151		%REC	1	4/18/2008
Surr: Nitrobenzene-d5	69.9	26.5-122		%REC	1	4/18/2008
Surr: Phenol-d5	73.8	37.6-118		%REC	1	4/18/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Toluene	1.1	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Naphthalene	1.6	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
1-Methylnaphthalene	5.7	2.0		mg/Kg	10	4/20/2008 5:48:30 AM
2-Methylnaphthalene	7.2	2.0		mg/Kg	10	4/20/2008 5:48:30 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 5:48:30 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 5:48:30 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 5:48:30 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-4-HP
Lab Order:	0804138	**Collection Date:**	4/8/2008 10:15:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-28	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 5:48:30 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 5:48:30 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 5:48:30 AM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 5:48:30 AM
Xylenes, Total	3.2	1.0		mg/Kg	10	4/20/2008 5:48:30 AM
Surr: 1,2-Dichloroethane-d4	98.5	68.7-122		%REC	10	4/20/2008 5:48:30 AM
Surr: 4-Bromofluorobenzene	93.6	79.3-126		%REC	10	4/20/2008 5:48:30 AM
Surr: Dibromofluoromethane	104	64.4-119		%REC	10	4/20/2008 5:48:30 AM
Surr: Toluene-d8	98.0	86.5-121		%REC	10	4/20/2008 5:48:30 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-5-HP
Lab Order:	0804138	**Collection Date:**	4/9/2008 8:20:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-29	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	51000	5000		mg/Kg	50	4/18/2008 5:30:48 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/18/2008 5:30:48 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/18/2008 5:30:48 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 4:53:43 AM
Surr: BFB	102	84-138		%REC	20	4/19/2008 4:53:43 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	4.7	1.6		mg/Kg	50	4/28/2008 3:14:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	14	2.5		mg/Kg	1	4/23/2008 8:29:01 AM
Barium	160	1.0		mg/Kg	10	4/23/2008 9:44:13 AM
Cadmium	0.62	0.10		mg/Kg	1	4/23/2008 8:29:01 AM
Chromium	53	3.0		mg/Kg	10	4/23/2008 9:44:13 AM
Lead	23	0.25		mg/Kg	1	4/28/2008 10:01:18 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:44:13 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 10:01:18 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/20/2008
Acenaphthylene	ND	30		mg/Kg	1	4/20/2008
Aniline	ND	30		mg/Kg	1	4/20/2008
Anthracene	ND	30		mg/Kg	1	4/20/2008
Azobenzene	ND	30		mg/Kg	1	4/20/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/20/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/20/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/20/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzoic acid	ND	50		mg/Kg	1	4/20/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/20/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/20/2008
Carbazole	ND	30		mg/Kg	1	4/20/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/20/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/20/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-5-HP
Lab Order:	0804138	**Collection Date:**	4/9/2008 8:20:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-29	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/20/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Chrysene	ND	30		mg/Kg	1	4/20/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/20/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/20/2008
Dibenzofuran	ND	30		mg/Kg	1	4/20/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/20/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/20/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/20/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
Fluoranthene	ND	38		mg/Kg	1	4/20/2008
Fluorene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/20/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/20/2008
Hexachloroethane	ND	30		mg/Kg	1	4/20/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/20/2008
Isophorone	ND	75		mg/Kg	1	4/20/2008
2-Methylnaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/20/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/20/2008
Naphthalene	ND	30		mg/Kg	1	4/20/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/20/2008
Nitrobenzene	ND	75		mg/Kg	1	4/20/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/20/2008
Phenanthrene	ND	30		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-5-HP
Lab Order:	0804138	**Collection Date:**	4/9/2008 8:20:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-29	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/20/2008
Pyrene	ND	30		mg/Kg	1	4/20/2008
Pyridine	ND	75		mg/Kg	1	4/20/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/20/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
Surr: 2,4,6-Tribromophenol	73.4	35.5-141		%REC	1	4/20/2008
Surr: 2-Fluorobiphenyl	91.8	30.4-128		%REC	1	4/20/2008
Surr: 2-Fluorophenol	82.7	28.1-129		%REC	1	4/20/2008
Surr: 4-Terphenyl-d14	63.7	34.6-151		%REC	1	4/20/2008
Surr: Nitrobenzene-d5	70.9	26.5-122		%REC	1	4/20/2008
Surr: Phenol-d5	73.1	37.6-118		%REC	1	4/20/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Toluene	1.1	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,2,4-Trimethylbenzene	1.1	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Naphthalene	1.2	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
1-Methylnaphthalene	5.4	2.0		mg/Kg	10	4/20/2008 6:23:38 AM
2-Methylnaphthalene	6.6	2.0		mg/Kg	10	4/20/2008 6:23:38 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 6:23:38 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 6:23:38 AM
Carbon disulfide	5.8	5.0		mg/Kg	10	4/20/2008 6:23:38 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-5-HP
Lab Order:	0804138	**Collection Date:**	4/9/2008 8:20:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-29	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 6:23:38 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 6:23:38 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 6:23:38 AM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 6:23:38 AM
Xylenes, Total	1.8	1.0		mg/Kg	10	4/20/2008 6:23:38 AM
Surr: 1,2-Dichloroethane-d4	96.2	68.7-122		%REC	10	4/20/2008 6:23:38 AM
Surr: 4-Bromofluorobenzene	97.7	79.3-126		%REC	10	4/20/2008 6:23:38 AM
Surr: Dibromofluoromethane	102	64.4-119		%REC	10	4/20/2008 6:23:38 AM
Surr: Toluene-d8	98.9	86.5-121		%REC	10	4/20/2008 6:23:38 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT: Western Refining Southwest, Gallup
Lab Order: 0804138
Project: Evaporation Pond/Aeration Lagoon
Lab ID: 0804138-30

Client Sample ID: AL2-1-SS
Collection Date: 4/9/2008 10:40:00 AM
Date Received: 4/11/2008
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	50000	5000		mg/Kg	50	4/18/2008 6:04:38 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/18/2008 6:04:38 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/18/2008 6:04:38 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 5:23:48 AM
Surr: BFB	103	84-138		%REC	20	4/19/2008 5:23:48 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	8.4	1.6		mg/Kg	50	4/28/2008 3:17:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	20	2.5		mg/Kg	1	4/23/2008 8:31:41 AM
Barium	260	1.0		mg/Kg	10	4/23/2008 9:46:52 AM
Cadmium	6.6	0.10		mg/Kg	1	4/23/2008 8:31:41 AM
Chromium	30	0.30		mg/Kg	1	4/23/2008 8:31:41 AM
Lead	48	2.5		mg/Kg	10	4/28/2008 11:29:02 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:46:52 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 10:03:47 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/20/2008
Acenaphthylene	ND	30		mg/Kg	1	4/20/2008
Aniline	ND	30		mg/Kg	1	4/20/2008
Anthracene	ND	30		mg/Kg	1	4/20/2008
Azobenzene	ND	30		mg/Kg	1	4/20/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/20/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/20/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/20/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzoic acid	ND	50		mg/Kg	1	4/20/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/20/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/20/2008
Carbazole	ND	30		mg/Kg	1	4/20/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/20/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/20/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-1-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:40:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-30	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Chloronaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/20/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Chrysene	ND	30		mg/Kg	1	4/20/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/20/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/20/2008
Dibenzofuran	ND	30		mg/Kg	1	4/20/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/20/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/20/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/20/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
Fluoranthene	ND	38		mg/Kg	1	4/20/2008
Fluorene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/20/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/20/2008
Hexachloroethane	ND	30		mg/Kg	1	4/20/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/20/2008
Isophorone	ND	75		mg/Kg	1	4/20/2008
2-Methylnaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/20/2008
3+4-Methylphenol	150	30		mg/Kg	1	4/20/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/20/2008
Naphthalene	ND	30		mg/Kg	1	4/20/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/20/2008
Nitrobenzene	ND	75		mg/Kg	1	4/20/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/20/2008
Phenanthrene	ND	30		mg/Kg	1	4/20/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-1-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:40:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-30	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/20/2008
Pyrene	ND	30		mg/Kg	1	4/20/2008
Pyridine	ND	75		mg/Kg	1	4/20/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/20/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
Surr: 2,4,6-Tribromophenol	58.9	35.5-141		%REC	1	4/20/2008
Surr: 2-Fluorobiphenyl	62.1	30.4-128		%REC	1	4/20/2008
Surr: 2-Fluorophenol	87.4	28.1-129		%REC	1	4/20/2008
Surr: 4-Terphenyl-d14	43.7	34.6-151		%REC	1	4/20/2008
Surr: Nitrobenzene-d5	78.8	26.5-122		%REC	1	4/20/2008
Surr: Phenol-d5	75.3	37.6-118		%REC	1	4/20/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Toluene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,2,4-Trimethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Naphthalene	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
1-Methylnaphthalene	ND	2.0		mg/Kg	10	4/20/2008 6:59:11 AM
2-Methylnaphthalene	ND	2.0		mg/Kg	10	4/20/2008 6:59:11 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 6:59:11 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 6:59:11 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 6:59:11 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-1-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:40:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-30	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.60		mg/Kg	10	4/20/2008 6:59:11 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 6:59:11 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 6:59:11 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 6:59:11 AM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 6:59:11 AM
Xylenes, Total	ND	1.0		mg/Kg	10	4/20/2008 6:59:11 AM
Surr: 1,2-Dichloroethane-d4	100	68.7-122		%REC	10	4/20/2008 6:59:11 AM
Surr: 4-Bromofluorobenzene	103	79.3-126		%REC	10	4/20/2008 6:59:11 AM
Surr: Dibromofluoromethane	102	64.4-119		%REC	10	4/20/2008 6:59:11 AM
Surr: Toluene-d8	98.5	86.5-121		%REC	10	4/20/2008 6:59:11 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-2-SS
Lab Order:	0804138	**Collection Date:**	4/8/2008 3:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-31	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	260000	5000		mg/Kg	50	4/17/2008 4:19:11 PM
Motor Oil Range Organics (MRO)	31000	25000		mg/Kg	50	4/17/2008 4:19:11 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 4:19:11 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 5:53:56 AM
Surr: BFB	101	84-138		%REC	20	4/19/2008 5:53:56 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	6.8	1.6		mg/Kg	50	4/28/2008 3:20:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	13	2.5		mg/Kg	1	4/23/2008 8:34:18 AM
Barium	500	2.0		mg/Kg	20	4/23/2008 9:53:51 AM
Cadmium	0.32	0.10		mg/Kg	1	4/23/2008 8:34:18 AM
Chromium	21	0.30		mg/Kg	1	4/23/2008 8:34:18 AM
Lead	24	0.25		mg/Kg	1	4/28/2008 10:06:19 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:49:31 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 10:06:19 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/20/2008
Acenaphthylene	ND	30		mg/Kg	1	4/20/2008
Aniline	ND	30		mg/Kg	1	4/20/2008
Anthracene	ND	30		mg/Kg	1	4/20/2008
Azobenzene	ND	30		mg/Kg	1	4/20/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/20/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/20/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/20/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzoic acid	ND	50		mg/Kg	1	4/20/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/20/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/20/2008
Carbazole	ND	30		mg/Kg	1	4/20/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/20/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-2-SS
Lab Order:	0804138	**Collection Date:**	4/8/2008 3:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-31	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/20/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Chrysene	ND	30		mg/Kg	1	4/20/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/20/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/20/2008
Dibenzofuran	ND	30		mg/Kg	1	4/20/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/20/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/20/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/20/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
Fluoranthene	ND	38		mg/Kg	1	4/20/2008
Fluorene	98	30		mg/Kg	1	4/20/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/20/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/20/2008
Hexachloroethane	ND	30		mg/Kg	1	4/20/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/20/2008
Isophorone	ND	75		mg/Kg	1	4/20/2008
2-Methylnaphthalene	450	38		mg/Kg	1	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/20/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/20/2008
Naphthalene	38	30		mg/Kg	1	4/20/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/20/2008
Nitrobenzene	ND	75		mg/Kg	1	4/20/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/20/2008
Phenanthrene	230	30		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-2-SS
Lab Order:	0804138	**Collection Date:**	4/8/2008 3:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-31	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/20/2008
Pyrene	ND	30		mg/Kg	1	4/20/2008
Pyridine	ND	75		mg/Kg	1	4/20/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/20/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
Surr: 2,4,6-Tribromophenol	35.5	35.5-141		%REC	1	4/20/2008
Surr: 2-Fluorobiphenyl	38.5	30.4-128		%REC	1	4/20/2008
Surr: 2-Fluorophenol	86.8	28.1-129		%REC	1	4/20/2008
Surr: 4-Terphenyl-d14	53.9	34.6-151		%REC	1	4/20/2008
Surr: Nitrobenzene-d5	82.6	26.5-122		%REC	1	4/20/2008
Surr: Phenol-d5	69.3	37.6-118		%REC	1	4/20/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Toluene	2.1	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Ethylbenzene	0.72	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,2,4-Trimethylbenzene	4.5	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,3,5-Trimethylbenzene	1.1	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Naphthalene	5.8	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
1-Methylnaphthalene	26	2.0		mg/Kg	10	4/20/2008 9:20:52 AM
2-Methylnaphthalene	37	2.0		mg/Kg	10	4/20/2008 9:20:52 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 9:20:52 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 9:20:52 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 9:20:52 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-2-SS
Lab Order:	0804138	**Collection Date:**	4/8/2008 3:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-31	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 9:20:52 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 9:20:52 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 9:20:52 AM
n-Butylbenzene	1.0	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 9:20:52 AM
Xylenes, Total	4.9	1.0		mg/Kg	10	4/20/2008 9:20:52 AM
Surr: 1,2-Dichloroethane-d4	98.2	68.7-122		%REC	10	4/20/2008 9:20:52 AM
Surr: 4-Bromofluorobenzene	79.2	79.3-126	S	%REC	10	4/20/2008 9:20:52 AM
Surr: Dibromofluoromethane	98.1	64.4-119		%REC	10	4/20/2008 9:20:52 AM
Surr: Toluene-d8	97.5	86.5-121		%REC	10	4/20/2008 9:20:52 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-3-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:00:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-32	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	300000	5000		mg/Kg	50	4/17/2008 4:53:20 PM
Motor Oil Range Organics (MRO)	29000	25000		mg/Kg	50	4/17/2008 4:53:20 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/17/2008 4:53:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 6:24:07 AM
Surr: BFB	103	84-138		%REC	20	4/19/2008 6:24:07 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	8.9	1.6		mg/Kg	50	4/28/2008 3:41:55 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	8.4	2.5		mg/Kg	1	4/23/2008 8:36:55 AM
Barium	350	1.0		mg/Kg	10	4/23/2008 9:56:28 AM
Cadmium	0.42	0.10		mg/Kg	1	4/23/2008 8:36:55 AM
Chromium	14	0.30		mg/Kg	1	4/23/2008 8:36:55 AM
Lead	24	1.2		mg/Kg	5	4/28/2008 11:33:35 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:56:28 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 10:08:51 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/20/2008
Acenaphthylene	ND	30		mg/Kg	1	4/20/2008
Aniline	ND	30		mg/Kg	1	4/20/2008
Anthracene	ND	30		mg/Kg	1	4/20/2008
Azobenzene	ND	30		mg/Kg	1	4/20/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/20/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/20/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/20/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzoic acid	ND	50		mg/Kg	1	4/20/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/20/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/20/2008
Carbazole	ND	30		mg/Kg	1	4/20/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/20/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-3-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:00:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-32	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Chloronaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/20/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Chrysene	32	30		mg/Kg	1	4/20/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/20/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/20/2008
Dibenzofuran	ND	30		mg/Kg	1	4/20/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/20/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/20/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/20/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
Fluoranthene	ND	38		mg/Kg	1	4/20/2008
Fluorene	43	30		mg/Kg	1	4/20/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/20/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/20/2008
Hexachloroethane	ND	30		mg/Kg	1	4/20/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/20/2008
Isophorone	ND	75		mg/Kg	1	4/20/2008
2-Methylnaphthalene	300	38		mg/Kg	1	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/20/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/20/2008
Naphthalene	ND	30		mg/Kg	1	4/20/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/20/2008
Nitrobenzene	ND	75		mg/Kg	1	4/20/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/20/2008
Phenanthrene	250	30		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-3-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:00:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-32	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/20/2008
Pyrene	47	30		mg/Kg	1	4/20/2008
Pyridine	ND	75		mg/Kg	1	4/20/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/20/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
Surr: 2,4,6-Tribromophenol	25.9	35.5-141	S	%REC	1	4/20/2008
Surr: 2-Fluorobiphenyl	41.3	30.4-128		%REC	1	4/20/2008
Surr: 2-Fluorophenol	84.8	28.1-129		%REC	1	4/20/2008
Surr: 4-Terphenyl-d14	31.7	34.6-151	S	%REC	1	4/20/2008
Surr: Nitrobenzene-d5	71.7	26.5-122		%REC	1	4/20/2008
Surr: Phenol-d5	66.3	37.6-118		%REC	1	4/20/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Toluene	1.2	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,2,4-Trimethylbenzene	2.9	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,3,5-Trimethylbenzene	0.54	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Naphthalene	4.6	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
1-Methylnaphthalene	21	2.0		mg/Kg	10	4/20/2008 9:56:29 AM
2-Methylnaphthalene	27	2.0		mg/Kg	10	4/20/2008 9:56:29 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 9:56:29 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 9:56:29 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 9:56:29 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-3-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:00:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-32	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 9:56:29 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
4-isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 9:56:29 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 9:56:29 AM
n-Butylbenzene	0.66	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 9:56:29 AM
Xylenes, Total	2.8	1.0		mg/Kg	10	4/20/2008 9:56:29 AM
Surr: 1,2-Dichloroethane-d4	95.4	68.7-122		%REC	10	4/20/2008 9:56:29 AM
Surr: 4-Bromofluorobenzene	90.3	79.3-126		%REC	10	4/20/2008 9:56:29 AM
Surr: Dibromofluoromethane	95.8	64.4-119		%REC	10	4/20/2008 9:56:29 AM
Surr: Toluene-d8	96.6	86.5-121		%REC	10	4/20/2008 9:56:29 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-4-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:25:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-33	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	250000	5000		mg/Kg	50	4/18/2008 8:19:52 PM
Motor Oil Range Organics (MRO)	35000	25000		mg/Kg	50	4/18/2008 8:19:52 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/18/2008 8:19:52 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 6:54:09 AM
Surr: BFB	103	84-138		%REC	20	4/19/2008 6:54:09 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	8.1	1.6		mg/Kg	50	4/28/2008 3:25:49 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	14	2.5		mg/Kg	1	4/23/2008 8:39:36 AM
Barium	190	1.0		mg/Kg	10	4/23/2008 9:59:06 AM
Cadmium	0.42	0.10		mg/Kg	1	4/23/2008 8:39:36 AM
Chromium	16	0.30		mg/Kg	1	4/23/2008 8:39:36 AM
Lead	32	0.25		mg/Kg	1	4/28/2008 10:11:24 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 9:59:06 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 10:11:24 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/20/2008
Acenaphthylene	ND	30		mg/Kg	1	4/20/2008
Aniline	ND	30		mg/Kg	1	4/20/2008
Anthracene	ND	30		mg/Kg	1	4/20/2008
Azobenzene	ND	30		mg/Kg	1	4/20/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/20/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/20/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/20/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzoic acid	ND	50		mg/Kg	1	4/20/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/20/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/20/2008
Carbazole	ND	30		mg/Kg	1	4/20/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/20/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-4-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:25:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-33	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/20/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Chrysene	ND	30		mg/Kg	1	4/20/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/20/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/20/2008
Dibenzofuran	ND	30		mg/Kg	1	4/20/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/20/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/20/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/20/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
Fluoranthene	ND	38		mg/Kg	1	4/20/2008
Fluorene	44	30		mg/Kg	1	4/20/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/20/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/20/2008
Hexachloroethane	ND	30		mg/Kg	1	4/20/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/20/2008
Isophorone	ND	75		mg/Kg	1	4/20/2008
2-Methylnaphthalene	190	38		mg/Kg	1	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/20/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/20/2008
Naphthalene	44	30		mg/Kg	1	4/20/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/20/2008
Nitrobenzene	ND	75		mg/Kg	1	4/20/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/20/2008
Phenanthrene	210	30		mg/Kg	1	4/20/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-4-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:25:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-33	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/20/2008
Pyrene	ND	30		mg/Kg	1	4/20/2008
Pyridine	ND	75		mg/Kg	1	4/20/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/20/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
Surr: 2,4,6-Tribromophenol	35.8	35.5-141		%REC	1	4/20/2008
Surr: 2-Fluorobiphenyl	46.5	30.4-128		%REC	1	4/20/2008
Surr: 2-Fluorophenol	82.3	28.1-129		%REC	1	4/20/2008
Surr: 4-Terphenyl-d14	61.5	34.6-151		%REC	1	4/20/2008
Surr: Nitrobenzene-d5	77.2	26.5-122		%REC	1	4/20/2008
Surr: Phenol-d5	66.5	37.6-118		%REC	1	4/20/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Toluene	1.6	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Ethylbenzene	0.56	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,2,4-Trimethylbenzene	4.1	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,3,5-Trimethylbenzene	0.72	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Naphthalene	5.4	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
1-Methylnaphthalene	24	2.0		mg/Kg	10	4/20/2008 10:32:02 AM
2-Methylnaphthalene	30	2.0		mg/Kg	10	4/20/2008 10:32:02 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 10:32:02 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 10:32:02 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 10:32:02 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-4-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 10:25:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-33	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 10:32:02 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 10:32:02 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 10:32:02 AM
n-Butylbenzene	1.1	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 10:32:02 AM
Xylenes, Total	4.0	1.0		mg/Kg	10	4/20/2008 10:32:02 AM
Surr: 1,2-Dichloroethane-d4	97.1	68.7-122		%REC	10	4/20/2008 10:32:02 AM
Surr: 4-Bromofluorobenzene	81.3	79.3-126		%REC	10	4/20/2008 10:32:02 AM
Surr: Dibromofluoromethane	93.9	64.4-119		%REC	10	4/20/2008 10:32:02 AM
Surr: Toluene-d8	101	86.5-121		%REC	10	4/20/2008 10:32:02 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-5-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 9:40:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-34	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	370000	5000		mg/Kg	50	4/18/2008 8:53:46 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/18/2008 8:53:46 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/18/2008 8:53:46 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	430	250		mg/Kg	50	4/18/2008 2:38:25 AM
Surr: BFB	118	84-138		%REC	50	4/18/2008 2:38:25 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	6.8	1.6		mg/Kg	50	4/28/2008 3:32:20 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	4.6	2.5		mg/Kg	1	4/23/2008 8:42:15 AM
Barium	310	1.0		mg/Kg	10	4/23/2008 10:01:45 AM
Cadmium	0.31	0.10		mg/Kg	1	4/23/2008 8:42:15 AM
Chromium	12	0.30		mg/Kg	1	4/23/2008 8:42:15 AM
Lead	18	0.25		mg/Kg	1	4/28/2008 10:13:57 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 10:01:45 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 10:13:57 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/20/2008
Acenaphthylene	ND	30		mg/Kg	1	4/20/2008
Aniline	ND	30		mg/Kg	1	4/20/2008
Anthracene	ND	30		mg/Kg	1	4/20/2008
Azobenzene	ND	30		mg/Kg	1	4/20/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/20/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/20/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/20/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzoic acid	ND	50		mg/Kg	1	4/20/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/20/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/20/2008
Carbazole	ND	30		mg/Kg	1	4/20/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/20/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-5-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 9:40:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-34	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Chloronaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/20/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Chrysene	ND	30		mg/Kg	1	4/20/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/20/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/20/2008
Dibenzofuran	ND	30		mg/Kg	1	4/20/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/20/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/20/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/20/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
Fluoranthene	ND	38		mg/Kg	1	4/20/2008
Fluorene	70	30		mg/Kg	1	4/20/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/20/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/20/2008
Hexachloroethane	ND	30		mg/Kg	1	4/20/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/20/2008
Isophorone	ND	75		mg/Kg	1	4/20/2008
2-Methylnaphthalene	550	38		mg/Kg	1	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/20/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/20/2008
Naphthalene	85	30		mg/Kg	1	4/20/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/20/2008
Nitrobenzene	ND	75		mg/Kg	1	4/20/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/20/2008
Phenanthrene	250	30		mg/Kg	1	4/20/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-5-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 9:40:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-34	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/20/2008
Pyrene	36	30		mg/Kg	1	4/20/2008
Pyridine	ND	75		mg/Kg	1	4/20/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/20/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
Surr: 2,4,6-Tribromophenol	12.3	35.5-141	S	%REC	1	4/20/2008
Surr: 2-Fluorobiphenyl	36.4	30.4-128		%REC	1	4/20/2008
Surr: 2-Fluorophenol	81.9	28.1-129		%REC	1	4/20/2008
Surr: 4-Terphenyl-d14	84.8	34.6-151		%REC	1	4/20/2008
Surr: Nitrobenzene-d5	84.2	26.5-122		%REC	1	4/20/2008
Surr: Phenol-d5	59.7	37.6-118		%REC	1	4/20/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	2.3	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Toluene	18	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Ethylbenzene	6.4	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,2,4-Trimethylbenzene	17	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,3,5-Trimethylbenzene	5.6	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Naphthalene	15	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
1-Methylnaphthalene	43	2.0		mg/Kg	10	4/20/2008 11:07:25 AM
2-Methylnaphthalene	35	4.0		mg/Kg	20	4/21/2008 1:48:32 PM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 11:07:25 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 11:07:25 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 11:07:25 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	AL2-5-SS
Lab Order:	0804138	**Collection Date:**	4/9/2008 9:40:00 AM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-34	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 11:07:25 AM
Isopropylbenzene	1.7	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
4-Isopropyltoluene	1.0	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 11:07:25 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 11:07:25 AM
n-Butylbenzene	3.4	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
n-Propylbenzene	3.0	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
sec-Butylbenzene	2.0	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 11:07:25 AM
Xylenes, Total	39	1.0		mg/Kg	10	4/20/2008 11:07:25 AM
Surr: 1,2-Dichloroethane-d4	95.2	68.7-122		%REC	10	4/20/2008 11:07:25 AM
Surr: 4-Bromofluorobenzene	83.7	79.3-126		%REC	10	4/20/2008 11:07:25 AM
Surr: Dibromofluoromethane	98.5	64.4-119		%REC	10	4/20/2008 11:07:25 AM
Surr: Toluene-d8	94.7	86.5-121		%REC	10	4/20/2008 11:07:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-1
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-35	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	200000	5000		mg/Kg	50	4/18/2008 10:34:50 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/18/2008 10:34:50 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/18/2008 10:34:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 7:24:11 AM
Surr: BFB	98.1	84-138		%REC	20	4/19/2008 7:24:11 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	6.8	1.6		mg/Kg	50	4/28/2008 3:35:31 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	5.4	2.5		mg/Kg	1	4/23/2008 8:44:55 AM
Barium	400	1.0		mg/Kg	10	4/23/2008 10:04:24 AM
Cadmium	0.45	0.10		mg/Kg	1	4/23/2008 8:44:55 AM
Chromium	9.7	0.30		mg/Kg	1	4/23/2008 8:44:55 AM
Lead	16	0.25		mg/Kg	1	4/28/2008 10:16:29 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 10:04:24 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 10:16:29 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/20/2008
Acenaphthylene	ND	30		mg/Kg	1	4/20/2008
Aniline	ND	30		mg/Kg	1	4/20/2008
Anthracene	ND	30		mg/Kg	1	4/20/2008
Azobenzene	ND	30		mg/Kg	1	4/20/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/20/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/20/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/20/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzoic acid	ND	50		mg/Kg	1	4/20/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/20/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/20/2008
Carbazole	ND	30		mg/Kg	1	4/20/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/20/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/20/2008

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-1
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-35	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/20/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Chrysene	45	30		mg/Kg	1	4/20/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/20/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/20/2008
Dibenzofuran	ND	30		mg/Kg	1	4/20/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/20/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/20/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/20/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
Fluoranthene	ND	38		mg/Kg	1	4/20/2008
Fluorene	53	30		mg/Kg	1	4/20/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/20/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/20/2008
Hexachloroethane	ND	30		mg/Kg	1	4/20/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/20/2008
Isophorone	ND	75		mg/Kg	1	4/20/2008
2-Methylnaphthalene	370	38		mg/Kg	1	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/20/2008
3+4-Methylphenol	53	30		mg/Kg	1	4/20/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/20/2008
Naphthalene	31	30		mg/Kg	1	4/20/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/20/2008
Nitrobenzene	ND	75		mg/Kg	1	4/20/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/20/2008
Phenanthrene	330	30		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-1
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-35	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Phenol	ND	30		mg/Kg	1	4/20/2008
Pyrene	47	30		mg/Kg	1	4/20/2008
Pyridine	ND	75		mg/Kg	1	4/20/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/20/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
Surr: 2,4,6-Tribromophenol	28.9	35.5-141	S	%REC	1	4/20/2008
Surr: 2-Fluorobiphenyl	66.1	30.4-128		%REC	1	4/20/2008
Surr: 2-Fluorophenol	104	28.1-129		%REC	1	4/20/2008
Surr: 4-Terphenyl-d14	127	34.6-151		%REC	1	4/20/2008
Surr: Nitrobenzene-d5	86.0	26.5-122		%REC	1	4/20/2008
Surr: Phenol-d5	75.6	37.6-118		%REC	1	4/20/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Toluene	0.51	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,2,4-Trimethylbenzene	1.5	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Naphthalene	2.6	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
1-Methylnaphthalene	12	2.0		mg/Kg	10	4/20/2008 11:43:12 AM
2-Methylnaphthalene	16	2.0		mg/Kg	10	4/20/2008 11:43:12 AM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 11:43:12 AM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 11:43:12 AM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 11:43:12 AM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-1
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-35	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 11:43:12 AM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 11:43:12 AM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 11:43:12 AM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 11:43:12 AM
Xylenes, Total	ND	1.0		mg/Kg	10	4/20/2008 11:43:12 AM
Surr: 1,2-Dichloroethane-d4	91.7	68.7-122		%REC	10	4/20/2008 11:43:12 AM
Surr: 4-Bromofluorobenzene	104	79.3-126		%REC	10	4/20/2008 11:43:12 AM
Surr: Dibromofluoromethane	96.5	64.4-119		%REC	10	4/20/2008 11:43:12 AM
Surr: Toluene-d8	96.7	86.5-121		%REC	10	4/20/2008 11:43:12 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-2
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-36	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	150000	5000		mg/Kg	50	4/18/2008 11:08:22 PM
Motor Oil Range Organics (MRO)	ND	25000		mg/Kg	50	4/18/2008 11:08:22 PM
Surr: DNOP	0	61.7-135	S	%REC	50	4/18/2008 11:08:22 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 7:54:10 AM
Surr: BFB	108	84-138		%REC	20	4/19/2008 7:54:10 AM
EPA METHOD 7471: MERCURY						Analyst: **SNV**
Mercury	4.4	1.6		mg/Kg	50	4/28/2008 3:38:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	17	2.5		mg/Kg	1	4/23/2008 8:47:38 AM
Barium	190	1.0		mg/Kg	10	4/23/2008 10:08:46 AM
Cadmium	0.58	0.10		mg/Kg	1	4/23/2008 8:47:38 AM
Chromium	24	0.30		mg/Kg	1	4/23/2008 8:47:38 AM
Lead	18	0.25		mg/Kg	1	4/28/2008 10:19:02 AM
Selenium	ND	25		mg/Kg	10	4/23/2008 10:08:46 AM
Silver	ND	0.25		mg/Kg	1	4/28/2008 10:19:02 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	30		mg/Kg	1	4/20/2008
Acenaphthylene	ND	30		mg/Kg	1	4/20/2008
Aniline	ND	30		mg/Kg	1	4/20/2008
Anthracene	ND	30		mg/Kg	1	4/20/2008
Azobenzene	ND	30		mg/Kg	1	4/20/2008
Benz(a)anthracene	ND	30		mg/Kg	1	4/20/2008
Benzo(a)pyrene	ND	30		mg/Kg	1	4/20/2008
Benzo(b)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzo(g,h,i)perylene	ND	75		mg/Kg	1	4/20/2008
Benzo(k)fluoranthene	ND	30		mg/Kg	1	4/20/2008
Benzoic acid	ND	50		mg/Kg	1	4/20/2008
Benzyl alcohol	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethoxy)methane	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroethyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-chloroisopropyl)ether	ND	30		mg/Kg	1	4/20/2008
Bis(2-ethylhexyl)phthalate	ND	75		mg/Kg	1	4/20/2008
4-Bromophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Butyl benzyl phthalate	ND	30		mg/Kg	1	4/20/2008
Carbazole	ND	30		mg/Kg	1	4/20/2008
4-Chloro-3-methylphenol	ND	75		mg/Kg	1	4/20/2008
4-Chloroaniline	ND	75		mg/Kg	1	4/20/2008

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-2
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-36	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Chloronaphthalene	ND	38		mg/Kg	1	4/20/2008
2-Chlorophenol	ND	30		mg/Kg	1	4/20/2008
4-Chlorophenyl phenyl ether	ND	30		mg/Kg	1	4/20/2008
Chrysene	ND	30		mg/Kg	1	4/20/2008
Di-n-butyl phthalate	ND	75		mg/Kg	1	4/20/2008
Di-n-octyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dibenz(a,h)anthracene	ND	30		mg/Kg	1	4/20/2008
Dibenzofuran	ND	30		mg/Kg	1	4/20/2008
1,2-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,3-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
1,4-Dichlorobenzene	ND	30		mg/Kg	1	4/20/2008
3,3'-Dichlorobenzidine	ND	38		mg/Kg	1	4/20/2008
Diethyl phthalate	ND	30		mg/Kg	1	4/20/2008
Dimethyl phthalate	ND	30		mg/Kg	1	4/20/2008
2,4-Dichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/20/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/20/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
2,6-Dinitrotoluene	ND	75		mg/Kg	1	4/20/2008
Fluoranthene	ND	38		mg/Kg	1	4/20/2008
Fluorene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/20/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/20/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/20/2008
Hexachloroethane	ND	30		mg/Kg	1	4/20/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/20/2008
Isophorone	ND	75		mg/Kg	1	4/20/2008
2-Methylnaphthalene	58	38		mg/Kg	1	4/20/2008
2-Methylphenol	ND	75		mg/Kg	1	4/20/2008
3+4-Methylphenol	34	30		mg/Kg	1	4/20/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/20/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	1	4/20/2008
Naphthalene	ND	30		mg/Kg	1	4/20/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/20/2008
4-Nitroaniline	ND	38		mg/Kg	1	4/20/2008
Nitrobenzene	ND	75		mg/Kg	1	4/20/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/20/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/20/2008
Phenanthrene	71	30		mg/Kg	1	4/20/2008

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-2
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-36	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Phenol	ND	30		mg/Kg	1	4/20/2008
Pyrene	ND	30		mg/Kg	1	4/20/2008
Pyridine	ND	75		mg/Kg	1	4/20/2008
1,2,4-Trichlorobenzene	ND	30		mg/Kg	1	4/20/2008
2,4,5-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
2,4,6-Trichlorophenol	ND	30		mg/Kg	1	4/20/2008
Surr: 2,4,6-Tribromophenol	78.3	35.5-141		%REC	1	4/20/2008
Surr: 2-Fluorobiphenyl	80.4	30.4-128		%REC	1	4/20/2008
Surr: 2-Fluorophenol	99.3	28.1-129		%REC	1	4/20/2008
Surr: 4-Terphenyl-d14	160	34.6-151	S	%REC	1	4/20/2008
Surr: Nitrobenzene-d5	74.7	26.5-122		%REC	1	4/20/2008
Surr: Phenol-d5	78.1	37.6-118		%REC	1	4/20/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Toluene	0.51	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,2,4-Trimethylbenzene	1.4	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Naphthalene	1.4	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
1-Methylnaphthalene	5.8	2.0		mg/Kg	10	4/20/2008 12:18:36 PM
2-Methylnaphthalene	7.7	2.0		mg/Kg	10	4/20/2008 12:18:36 PM
Acetone	ND	7.5		mg/Kg	10	4/20/2008 12:18:36 PM
Bromobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Bromoform	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Bromomethane	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
2-Butanone	ND	5.0		mg/Kg	10	4/20/2008 12:18:36 PM
Carbon disulfide	ND	5.0		mg/Kg	10	4/20/2008 12:18:36 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
Chlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Chloroethane	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
Chloroform	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Chloromethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Apr-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP1-2
Lab Order:	0804138	**Collection Date:**	4/9/2008 6:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	**Date Received:**	4/11/2008
Lab ID:	0804138-36	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/20/2008 12:18:36 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/20/2008 12:18:36 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/20/2008 12:18:36 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Styrene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/20/2008 12:18:36 PM
Xylenes, Total	1.0	1.0		mg/Kg	10	4/20/2008 12:18:36 PM
Surr: 1,2-Dichloroethane-d4	95.3	68.7-122		%REC	10	4/20/2008 12:18:36 PM
Surr: 4-Bromofluorobenzene	83.1	79.3-126		%REC	10	4/20/2008 12:18:36 PM
Surr: Dibromofluoromethane	99.0	64.4-119		%REC	10	4/20/2008 12:18:36 PM
Surr: Toluene-d8	97.3	86.5-121		%REC	10	4/20/2008 12:18:36 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range Organics									
Sample ID: MB-15653		*MBLK*			Batch ID:	**15653**	Analysis Date:	4/16/2008 6:17:27 PM	
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: MB-15654		*MBLK*			Batch ID:	**15654**	Analysis Date:	4/16/2008 8:00:27 PM	
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-15653		*LCS*			Batch ID:	**15653**	Analysis Date:	4/16/2008 6:51:47 PM	
Diesel Range Organics (DRO)	43.17	mg/Kg	10	86.3	64.6	116			
Sample ID: LCS-15654		*LCS*			Batch ID:	**15654**	Analysis Date:	4/16/2008 8:34:51 PM	
Diesel Range Organics (DRO)	42.92	mg/Kg	10	85.8	64.6	116			
Sample ID: LCSD-15653		*LCSD*			Batch ID:	**15653**	Analysis Date:	4/16/2008 7:26:07 PM	
Diesel Range Organics (DRO)	42.84	mg/Kg	10	85.7	64.6	116	0.781	17.4	
Sample ID: LCSD-15654		*LCSD*			Batch ID:	**15654**	Analysis Date:	4/16/2008 9:09:11 PM	
Diesel Range Organics (DRO)	45.88	mg/Kg	10	91.8	64.6	116	6.66	17.4	
Method: EPA Method 8015B: Gasoline Range									
Sample ID: MB-15641		*MBLK*			Batch ID:	**15641**	Analysis Date:	4/17/2008 12:40:47 AM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: MB-15642		*MBLK*			Batch ID:	**15642**	Analysis Date:	4/17/2008 11:07:42 PM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-15641		*LCS*			Batch ID:	**15641**	Analysis Date:	4/16/2008 11:40:25 PM	
Gasoline Range Organics (GRO)	24.68	mg/Kg	5.0	98.7	69.5	120			
Sample ID: LCS-15642		*LCS*			Batch ID:	**15642**	Analysis Date:	4/17/2008 10:07:36 PM	
Gasoline Range Organics (GRO)	24.50	mg/Kg	5.0	98.0	69.5	120			
Sample ID: LCSD-15641		*LCSD*			Batch ID:	**15641**	Analysis Date:	4/17/2008 12:10:42 AM	
Gasoline Range Organics (GRO)	24.48	mg/Kg	5.0	97.9	69.5	120	0.814	11.6	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-15669		*MBLK*			Batch ID:	15669	Analysis Date:		4/17/2008
Acenaphthene	ND	mg/Kg	0.20						
Acenaphthylene	ND	mg/Kg	0.20						
Aniline	ND	mg/Kg	0.20						
Anthracene	ND	mg/Kg	0.20						
Azobenzene	ND	mg/Kg	0.20						
Benz(a)anthracene	ND	mg/Kg	0.20						
Benzo(a)pyrene	ND	mg/Kg	0.20						
Benzo(b)fluoranthene	ND	mg/Kg	0.20						
Benzo(g,h,i)perylene	ND	mg/Kg	0.50						
Benzo(k)fluoranthene	ND	mg/Kg	0.20						
Benzoic acid	ND	mg/Kg	0.33						
Benzyl alcohol	ND	mg/Kg	0.20						
Bis(2-chloroethoxy)methane	ND	mg/Kg	0.20						
Bis(2-chloroethyl)ether	ND	mg/Kg	0.20						
Bis(2-chloroisopropyl)ether	ND	mg/Kg	0.20						
Bis(2-ethylhexyl)phthalate	ND	mg/Kg	0.50						
4-Bromophenyl phenyl ether	ND	mg/Kg	0.20						
Butyl benzyl phthalate	ND	mg/Kg	0.20						
Carbazole	ND	mg/Kg	0.20						
4-Chloro-3-methylphenol	ND	mg/Kg	0.50						
4-Chloroaniline	ND	mg/Kg	0.50						
2-Chloronaphthalene	ND	mg/Kg	0.25						
2-Chlorophenol	ND	mg/Kg	0.20						
4-Chlorophenyl phenyl ether	ND	mg/Kg	0.20						
Chrysene	ND	mg/Kg	0.20						
Di-n-butyl phthalate	ND	mg/Kg	0.50						
Di-n-octyl phthalate	ND	mg/Kg	0.20						
Dibenz(a,h)anthracene	ND	mg/Kg	0.20						
Dibenzofuran	ND	mg/Kg	0.20						
1,2-Dichlorobenzene	ND	mg/Kg	0.20						
1,3-Dichlorobenzene	ND	mg/Kg	0.20						
1,4-Dichlorobenzene	ND	mg/Kg	0.20						
3,3'-Dichlorobenzidine	ND	mg/Kg	0.25						
Diethyl phthalate	ND	mg/Kg	0.20						
Dimethyl phthalate	ND	mg/Kg	0.20						
2,4-Dichlorophenol	ND	mg/Kg	0.20						
2,4-Dimethylphenol	ND	mg/Kg	0.30						
4,6-Dinitro-2-methylphenol	ND	mg/Kg	0.50						
2,4-Dinitrophenol	ND	mg/Kg	0.50						
2,4-Dinitrotoluene	ND	mg/Kg	0.50						
2,6-Dinitrotoluene	ND	mg/Kg	0.50						
Fluoranthene	ND	mg/Kg	0.25						
Fluorene	ND	mg/Kg	0.20						
Hexachlorobenzene	ND	mg/Kg	0.20						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-15669		*MBLK*			Batch ID:	**15669**	Analysis Date:		4/17/2008
Hexachlorobutadiene	ND	mg/Kg	0.20						
Hexachlorocyclopentadiene	ND	mg/Kg	0.20						
Hexachloroethane	ND	mg/Kg	0.20						
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.25						
Isophorone	ND	mg/Kg	0.50						
2-Methylnaphthalene	ND	mg/Kg	0.25						
2-Methylphenol	ND	mg/Kg	0.50						
3+4-Methylphenol	ND	mg/Kg	0.20						
N-Nitrosodi-n-propylamine	ND	mg/Kg	0.20						
N-Nitrosodiphenylamine	ND	mg/Kg	0.20						
Naphthalene	ND	mg/Kg	0.20						
2-Nitroaniline	ND	mg/Kg	0.20						
3-Nitroaniline	ND	mg/Kg	0.20						
4-Nitroaniline	ND	mg/Kg	0.25						
Nitrobenzene	ND	mg/Kg	0.50						
2-Nitrophenol	ND	mg/Kg	0.20						
4-Nitrophenol	ND	mg/Kg	0.20						
Pentachlorophenol	ND	mg/Kg	0.33						
Phenanthrene	ND	mg/Kg	0.20						
Phenol	ND	mg/Kg	0.20						
Pyrene	ND	mg/Kg	0.20						
Pyridine	ND	mg/Kg	0.50						
1,2,4-Trichlorobenzene	ND	mg/Kg	0.20						
2,4,5-Trichlorophenol	ND	mg/Kg	0.20						
2,4,6-Trichlorophenol	ND	mg/Kg	0.20						
Sample ID: mb-15682		*MBLK*			Batch ID:	**15682**	Analysis Date:		4/18/2008
Acenaphthene	ND	mg/Kg	0.20						
Acenaphthylene	ND	mg/Kg	0.20						
Aniline	ND	mg/Kg	0.20						
Anthracene	ND	mg/Kg	0.20						
Azobenzene	ND	mg/Kg	0.20						
Benz(a)anthracene	ND	mg/Kg	0.20						
Benzo(a)pyrene	ND	mg/Kg	0.20						
Benzo(b)fluoranthene	ND	mg/Kg	0.20						
Benzo(g,h,i)perylene	ND	mg/Kg	0.50						
Benzo(k)fluoranthene	ND	mg/Kg	0.20						
Benzoic acid	ND	mg/Kg	0.33						
Benzyl alcohol	ND	mg/Kg	0.20						
Bis(2-chloroethoxy)methane	ND	mg/Kg	0.20						
Bis(2-chloroethyl)ether	ND	mg/Kg	0.20						
Bis(2-chloroisopropyl)ether	ND	mg/Kg	0.20						
Bis(2-ethylhexyl)phthalate	ND	mg/Kg	0.50						
4-Bromophenyl phenyl ether	ND	mg/Kg	0.20						
Butyl benzyl phthalate	ND	mg/Kg	0.20						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-15682		*MBLK*			Batch ID:	**15682**	Analysis Date:		4/18/2008
Carbazole	ND	mg/Kg	0.20						
4-Chloro-3-methylphenol	ND	mg/Kg	0.50						
4-Chloroaniline	ND	mg/Kg	0.50						
2-Chloronaphthalene	ND	mg/Kg	0.25						
2-Chlorophenol	ND	mg/Kg	0.20						
4-Chlorophenyl phenyl ether	ND	mg/Kg	0.20						
Chrysene	ND	mg/Kg	0.20						
Di-n-butyl phthalate	ND	mg/Kg	0.50						
Di-n-octyl phthalate	ND	mg/Kg	0.20						
Dibenz(a,h)anthracene	ND	mg/Kg	0.20						
Dibenzofuran	ND	mg/Kg	0.20						
1,2-Dichlorobenzene	ND	mg/Kg	0.20						
1,3-Dichlorobenzene	ND	mg/Kg	0.20						
1,4-Dichlorobenzene	ND	mg/Kg	0.20						
3,3'-Dichlorobenzidine	ND	mg/Kg	0.25						
Diethyl phthalate	ND	mg/Kg	0.20						
Dimethyl phthalate	ND	mg/Kg	0.20						
2,4-Dichlorophenol	ND	mg/Kg	0.20						
2,4-Dimethylphenol	ND	mg/Kg	0.30						
4,6-Dinitro-2-methylphenol	ND	mg/Kg	0.50						
2,4-Dinitrophenol	ND	mg/Kg	0.50						
2,4-Dinitrotoluene	ND	mg/Kg	0.50						
2,6-Dinitrotoluene	ND	mg/Kg	0.50						
Fluoranthene	ND	mg/Kg	0.25						
Fluorene	ND	mg/Kg	0.20						
Hexachlorobenzene	ND	mg/Kg	0.20						
Hexachlorobutadiene	ND	mg/Kg	0.20						
Hexachlorocyclopentadiene	ND	mg/Kg	0.20						
Hexachloroethane	ND	mg/Kg	0.20						
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.25						
Isophorone	ND	mg/Kg	0.50						
2-Methylnaphthalene	ND	mg/Kg	0.25						
2-Methylphenol	ND	mg/Kg	0.50						
3+4-Methylphenol	ND	mg/Kg	0.20						
N-Nitrosodi-n-propylamine	ND	mg/Kg	0.20						
N-Nitrosodiphenylamine	ND	mg/Kg	0.20						
Naphthalene	ND	mg/Kg	0.20						
2-Nitroaniline	ND	mg/Kg	0.20						
3-Nitroaniline	ND	mg/Kg	0.20						
4-Nitroaniline	ND	mg/Kg	0.25						
Nitrobenzene	ND	mg/Kg	0.50						
2-Nitrophenol	ND	mg/Kg	0.20						
4-Nitrophenol	ND	mg/Kg	0.20						
Pentachlorophenol	ND	mg/Kg	0.33						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-15682		*MBLK*			Batch ID:	**15682**	Analysis Date:		4/18/2008
Phenanthrene	ND	mg/Kg	0.20						
Phenol	ND	mg/Kg	0.20						
Pyrene	ND	mg/Kg	0.20						
Pyridine	ND	mg/Kg	0.50						
1,2,4-Trichlorobenzene	ND	mg/Kg	0.20						
2,4,5-Trichlorophenol	ND	mg/Kg	0.20						
2,4,6-Trichlorophenol	ND	mg/Kg	0.20						
Sample ID: lcs-15669		*LCS*			Batch ID:	**15669**	Analysis Date:		4/17/2008
Acenaphthene	0.9563	mg/Kg	0.20	57.3	46.6	109			
4-Chloro-3-methylphenol	2.026	mg/Kg	0.50	60.9	43.3	116			
2-Chlorophenol	1.973	mg/Kg	0.20	59.2	42.5	108			
1,4-Dichlorobenzene	1.052	mg/Kg	0.20	63.0	32.4	115			
2,4-Dinitrotoluene	0.9647	mg/Kg	0.50	57.8	45.1	100			
N-Nitrosodi-n-propylamine	1.003	mg/Kg	0.20	60.1	43	113			
4-Nitrophenol	2.093	mg/Kg	0.20	62.9	37.3	123			
Pentachlorophenol	2.104	mg/Kg	0.33	63.2	31.9	116			
Phenol	2.015	mg/Kg	0.20	60.5	41.6	111			
Pyrene	0.8913	mg/Kg	0.20	53.4	37.3	105			
1,2,4-Trichlorobenzene	1.086	mg/Kg	0.20	65.0	30.4	114			
Sample ID: lcs-15682		*LCS*			Batch ID:	**15682**	Analysis Date:		4/18/2008
Acenaphthene	0.9750	mg/Kg	0.20	58.4	46.6	109			
4-Chloro-3-methylphenol	2.085	mg/Kg	0.50	62.6	43.3	116			
2-Chlorophenol	2.026	mg/Kg	0.20	60.8	42.5	108			
1,4-Dichlorobenzene	1.038	mg/Kg	0.20	62.2	32.4	115			
2,4-Dinitrotoluene	0.9477	mg/Kg	0.50	56.7	45.1	100			
N-Nitrosodi-n-propylamine	0.9840	mg/Kg	0.20	58.9	43	113			
4-Nitrophenol	1.697	mg/Kg	0.20	51.0	37.3	123			
Pentachlorophenol	1.895	mg/Kg	0.33	56.9	31.9	116			
Phenol	1.922	mg/Kg	0.20	57.7	41.6	111			
Pyrene	0.9677	mg/Kg	0.20	57.9	37.3	105			
1,2,4-Trichlorobenzene	1.124	mg/Kg	0.20	67.3	30.4	114			
Method: EPA Method 7471: Mercury									
Sample ID: MB-15688		*MBLK*			Batch ID:	**15688**	Analysis Date:		4/18/2008 3:16:25 PM
Mercury	ND	mg/Kg	0.033						
Sample ID: MB-15767		*MBLK*			Batch ID:	**15767**	Analysis Date:		4/28/2008 2:31:52 PM
Mercury	ND	mg/Kg	0.033						
Sample ID: LCS-15688		*LCS*			Batch ID:	**15688**	Analysis Date:		4/18/2008 3:17:58 PM
Mercury	0.1661	mg/Kg	0.033	99.7	80	120			
Sample ID: LCS-15767		*LCS*			Batch ID:	**15767**	Analysis Date:		4/28/2008 2:33:26 PM
Mercury	0.1608	mg/Kg	0.033	94.4	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Soil Metals									
Sample ID: MB-15629		*MBLK*			Batch ID:	**15629**	Analysis Date:	4/16/2008 7:48:38 AM	
Arsenic	ND	mg/Kg	2.5						
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Chromium	ND	mg/Kg	0.30						
Lead	ND	mg/Kg	0.25						
Selenium	ND	mg/Kg	2.5						
Silver	ND	mg/Kg	0.25						
Sample ID: MB-15664		*MBLK*			Batch ID:	**15664**	Analysis Date:	4/21/2008 9:14:32 AM	
Arsenic	ND	mg/Kg	2.5						
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Chromium	ND	mg/Kg	0.30						
Selenium	ND	mg/Kg	2.5						
Silver	ND	mg/Kg	0.25						
Sample ID: MB-15708		*MBLK*			Batch ID:	**15708**	Analysis Date:	4/23/2008 7:56:25 AM	
Arsenic	ND	mg/Kg	2.5						
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Chromium	ND	mg/Kg	0.30						
Selenium	ND	mg/Kg	2.5						
Sample ID: MB-15664		*MBLK*			Batch ID:	**15664**	Analysis Date:	4/28/2008 7:36:54 AM	
Lead	ND	mg/Kg	0.25						
Sample ID: MB-15708		*MBLK*			Batch ID:	**15708**	Analysis Date:	4/28/2008 9:26:38 AM	
Lead	ND	mg/Kg	0.25						
Silver	ND	mg/Kg	0.25						
Sample ID: LCS-15629		*LCS*			Batch ID:	**15629**	Analysis Date:	4/16/2008 7:51:14 AM	
Arsenic	23.52	mg/Kg	2.5	94.1	80	120			
Barium	24.17	mg/Kg	0.10	96.3	80	120			
Cadmium	24.12	mg/Kg	0.10	96.5	80	120			
Chromium	24.50	mg/Kg	0.30	98.0	80	120			
Lead	23.25	mg/Kg	0.25	93.0	80	120			
Selenium	24.71	mg/Kg	2.5	98.8	80	120			
Silver	24.42	mg/Kg	0.25	97.2	80	120			
Sample ID: LCS-15664		*LCS*			Batch ID:	**15664**	Analysis Date:	4/21/2008 9:17:11 AM	
Arsenic	24.46	mg/Kg	2.5	97.8	80	120			
Barium	25.36	mg/Kg	0.10	101	80	120			
Cadmium	26.14	mg/Kg	0.10	105	80	120			
Chromium	26.14	mg/Kg	0.30	105	80	120			
Selenium	25.50	mg/Kg	2.5	102	80	120			
Silver	25.83	mg/Kg	0.25	103	80	120			
Sample ID: LCS-15708		*LCS*			Batch ID:	**15708**	Analysis Date:	4/23/2008 7:59:01 AM	
Arsenic	24.89	mg/Kg	2.5	99.5	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Soil Metals									
Sample ID: LCS-15708		*LCS*			Batch ID:	**15708**	Analysis Date:	4/23/2008 7:59:01 AM	
Barium	25.23	mg/Kg	0.10	101	80	120			
Cadmium	24.98	mg/Kg	0.10	99.5	80	120			
Chromium	25.63	mg/Kg	0.30	103	80	120			
Selenium	25.36	mg/Kg	2.5	95.3	80	120			
Sample ID: LCS-15664		*LCS*			Batch ID:	**15664**	Analysis Date:	4/28/2008 7:39:25 AM	
Lead	24.63	mg/Kg	0.25	98.5	80	120			
Sample ID: LCS-15708		*LCS*			Batch ID:	**15708**	Analysis Date:	4/28/2008 9:28:37 AM	
Lead	26.03	mg/Kg	0.25	104	80	120			
Silver	24.64	mg/Kg	0.25	98.5	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Method: EPA Method 8260B: VOLATILES

Sample ID: mb-15641 *MBLK* Batch ID: **15641** Analysis Date: 4/19/2008 12:03:32 PM

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
1-Methylnaphthalene	ND	mg/Kg	0.20						
2-Methylnaphthalene	ND	mg/Kg	0.20						
Acetone	ND	mg/Kg	0.75						
Bromobenzene	ND	mg/Kg	0.050						
Bromodichloromethane	ND	mg/Kg	0.050						
Bromoform	ND	mg/Kg	0.050						
Bromomethane	ND	mg/Kg	0.10						
2-Butanone	ND	mg/Kg	0.50						
Carbon disulfide	ND	mg/Kg	0.50						
Carbon tetrachloride	ND	mg/Kg	0.10						
Chlorobenzene	ND	mg/Kg	0.050						
Chloroethane	ND	mg/Kg	0.10						
Chloroform	ND	mg/Kg	0.050						
Chloromethane	ND	mg/Kg	0.050						
2-Chlorotoluene	ND	mg/Kg	0.050						
4-Chlorotoluene	ND	mg/Kg	0.050						
cis-1,2-DCE	ND	mg/Kg	0.050						
cis-1,3-Dichloropropene	ND	mg/Kg	0.050						
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.10						
Dibromochloromethane	ND	mg/Kg	0.050						
Dibromomethane	ND	mg/Kg	0.10						
1,2-Dichlorobenzene	ND	mg/Kg	0.050						
1,3-Dichlorobenzene	ND	mg/Kg	0.050						
1,4-Dichlorobenzene	ND	mg/Kg	0.050						
Dichlorodifluoromethane	ND	mg/Kg	0.050						
1,1-Dichloroethane	ND	mg/Kg	0.10						
1,1-Dichloroethene	ND	mg/Kg	0.050						
1,2-Dichloropropane	ND	mg/Kg	0.050						
1,3-Dichloropropane	ND	mg/Kg	0.050						
2,2-Dichloropropane	ND	mg/Kg	0.10						
1,1-Dichloropropene	ND	mg/Kg	0.10						
Hexachlorobutadiene	ND	mg/Kg	0.10						
2-Hexanone	ND	mg/Kg	0.50						
Isopropylbenzene	ND	mg/Kg	0.050						
4-isopropyltoluene	ND	mg/Kg	0.050						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon
Work Order: 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: mb-15641		*MBLK*			Batch ID:	**15641**	Analysis Date:	4/19/2008 12:03:32 PM	
4-Methyl-2-pentanone	ND	mg/Kg	0.50						
Methylene chloride	ND	mg/Kg	0.15						
n-Butylbenzene	ND	mg/Kg	0.050						
n-Propylbenzene	ND	mg/Kg	0.050						
sec-Butylbenzene	ND	mg/Kg	0.050						
Styrene	ND	mg/Kg	0.050						
tert-Butylbenzene	ND	mg/Kg	0.050						
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.050						
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.050						
Tetrachloroethene (PCE)	ND	mg/Kg	0.050						
trans-1,2-DCE	ND	mg/Kg	0.050						
trans-1,3-Dichloropropene	ND	mg/Kg	0.050						
1,2,3-Trichlorobenzene	ND	mg/Kg	0.10						
1,2,4-Trichlorobenzene	ND	mg/Kg	0.050						
1,1,1-Trichloroethane	ND	mg/Kg	0.050						
1,1,2-Trichloroethane	ND	mg/Kg	0.050						
Trichloroethene (TCE)	ND	mg/Kg	0.050						
Trichlorofluoromethane	ND	mg/Kg	0.050						
1,2,3-Trichloropropane	ND	mg/Kg	0.10						
Vinyl chloride	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
Sample ID: mb-15642		*MBLK*			Batch ID:	**15642**	Analysis Date:	4/20/2008 2:16:06 AM	
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
1-Methylnaphthalene	ND	mg/Kg	0.20						
2-Methylnaphthalene	ND	mg/Kg	0.20						
Acetone	ND	mg/Kg	0.75						
Bromobenzene	ND	mg/Kg	0.050						
Bromodichloromethane	ND	mg/Kg	0.050						
Bromoform	ND	mg/Kg	0.050						
Bromomethane	ND	mg/Kg	0.10						
2-Butanone	ND	mg/Kg	0.50						
Carbon disulfide	ND	mg/Kg	0.50						
Carbon tetrachloride	ND	mg/Kg	0.10						
Chlorobenzene	ND	mg/Kg	0.050						
Chloroethane	ND	mg/Kg	0.10						
Chloroform	ND	mg/Kg	0.050						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: mb-15642		*MBLK*			Batch ID:	**15642**	Analysis Date:	4/20/2008 2:16:06 AM	
Chloromethane	ND	mg/Kg	0.050						
2-Chlorotoluene	ND	mg/Kg	0.050						
4-Chlorotoluene	ND	mg/Kg	0.050						
cis-1,2-DCE	ND	mg/Kg	0.050						
cis-1,3-Dichloropropene	ND	mg/Kg	0.050						
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.10						
Dibromochloromethane	ND	mg/Kg	0.050						
Dibromomethane	ND	mg/Kg	0.10						
1,2-Dichlorobenzene	ND	mg/Kg	0.050						
1,3-Dichlorobenzene	ND	mg/Kg	0.050						
1,4-Dichlorobenzene	ND	mg/Kg	0.050						
Dichlorodifluoromethane	ND	mg/Kg	0.050						
1,1-Dichloroethane	ND	mg/Kg	0.10						
1,1-Dichloroethene	ND	mg/Kg	0.050						
1,2-Dichloropropane	ND	mg/Kg	0.050						
1,3-Dichloropropane	ND	mg/Kg	0.050						
2,2-Dichloropropane	ND	mg/Kg	0.10						
1,1-Dichloropropene	ND	mg/Kg	0.10						
Hexachlorobutadiene	ND	mg/Kg	0.10						
2-Hexanone	ND	mg/Kg	0.50						
Isopropylbenzene	ND	mg/Kg	0.050						
4-Isopropyltoluene	ND	mg/Kg	0.050						
4-Methyl-2-pentanone	ND	mg/Kg	0.50						
Methylene chloride	ND	mg/Kg	0.15						
n-Butylbenzene	ND	mg/Kg	0.050						
n-Propylbenzene	ND	mg/Kg	0.050						
sec-Butylbenzene	ND	mg/Kg	0.050						
Styrene	ND	mg/Kg	0.050						
tert-Butylbenzene	ND	mg/Kg	0.050						
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.050						
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.050						
Tetrachloroethene (PCE)	ND	mg/Kg	0.050						
trans-1,2-DCE	ND	mg/Kg	0.050						
trans-1,3-Dichloropropene	ND	mg/Kg	0.050						
1,2,3-Trichlorobenzene	ND	mg/Kg	0.10						
1,2,4-Trichlorobenzene	ND	mg/Kg	0.050						
1,1,1-Trichloroethane	ND	mg/Kg	0.050						
1,1,2-Trichloroethane	ND	mg/Kg	0.050						
Trichloroethene (TCE)	ND	mg/Kg	0.050						
Trichlorofluoromethane	ND	mg/Kg	0.050						
1,2,3-Trichloropropane	ND	mg/Kg	0.10						
Vinyl chloride	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
Sample ID: lcs-15641		*LCS*			Batch ID:	**15641**	Analysis Date:	4/19/2008 12:39:09 PM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon

Work Order: 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: lcs-15641		*LCS*			Batch ID:	**15641**	Analysis Date:	4/19/2008 12:39:09 PM	
Benzene	1.034	mg/Kg	0.050	103	66.9	142			
Toluene	0.9402	mg/Kg	0.050	94.0	78.4	128			
Chlorobenzene	0.9868	mg/Kg	0.050	98.7	78.2	127			
1,1-Dichloroethene	1.059	mg/Kg	0.050	106	72.6	150			
Trichloroethene (TCE)	0.7977	mg/Kg	0.050	79.8	72.2	120			
Sample ID: lcs-15642		*LCS*			Batch ID:	**15642**	Analysis Date:	4/20/2008 2:51:27 AM	
Benzene	1.018	mg/Kg	0.050	102	66.9	142			
Toluene	0.9517	mg/Kg	0.050	95.2	78.4	128			
Chlorobenzene	0.9958	mg/Kg	0.050	99.6	78.2	127			
1,1-Dichloroethene	0.9984	mg/Kg	0.050	99.8	72.6	150			
Trichloroethene (TCE)	0.7805	mg/Kg	0.050	78.1	72.2	120			
Sample ID: lcsd-15641		*LCSD*			Batch ID:	**15641**	Analysis Date:	4/19/2008 1:15:05 PM	
Benzene	1.023	mg/Kg	0.050	102	66.9	142	1.12	20	
Toluene	0.9445	mg/Kg	0.050	94.4	78.4	128	0.453	20	
Chlorobenzene	1.021	mg/Kg	0.050	102	78.2	127	3.42	20	
1,1-Dichloroethene	1.099	mg/Kg	0.050	110	72.6	150	3.63	20	
Trichloroethene (TCE)	0.7770	mg/Kg	0.050	77.7	72.2	120	2.62	20	
Sample ID: lcsd-15642		*LCSD*			Batch ID:	**15642**	Analysis Date:	4/20/2008 3:26:44 AM	
Benzene	1.054	mg/Kg	0.050	105	66.9	142	3.49	20	
Toluene	0.8732	mg/Kg	0.050	87.3	78.4	128	8.60	20	
Chlorobenzene	0.9538	mg/Kg	0.050	95.4	78.2	127	4.30	20	
1,1-Dichloroethene	1.048	mg/Kg	0.050	105	72.6	150	4.84	20	
Trichloroethene (TCE)	0.7844	mg/Kg	0.050	78.4	72.2	120	0.492	20	

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Method: EPA Method 8260B: VOLATILES
Sample ID: 5ml rb II *MBLK* Batch ID: R28173 Analysis Date: 4/19/2008 6:07:13 AM

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb II		*MBLK*			Batch ID:	**R28173**	Analysis Date:	4/19/2008 6:07:13 AM	
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs II		*LCS*			Batch ID:	**R28173**	Analysis Date:	4/19/2008 5:38:04 AM	
Benzene	21.72	µg/L	1.0	109	86.8	120			
Toluene	18.58	µg/L	1.0	92.9	64.1	127			
Chlorobenzene	17.96	µg/L	1.0	89.8	82.4	113			
1,1-Dichloroethene	25.96	µg/L	1.0	130	86.5	132			
Trichloroethene (TCE)	21.13	µg/L	1.0	106	77.3	123			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name WESTERN REFINING GALLU

Date Received: 4/11/2008

Work Order Number 0804138

Received by: AT

Sample ID labels checked by: AS / AT (Initials)

Checklist completed by: _____ (Signature) 4/11/08 (Date)

Matrix: Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

1 of 3

Chain-of-Custody Record

Client: Western Refining Co - Gallup

Address: Route 3 Box 7 Gallup NM 87301

Phone #: 505-722-3833

email or Fax#: 505-722-0210

QA/QC Package: Cell 307 399-0890

☒ Standard ☐ Level 4 (Full Validation)

☐ Other

☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush

Project Name: Evaporation Pond/Aeration Lagoon

Project #: 1097-019-001

Project Manager: Regina Allen

Sampler: GP/SM

Cooler: X-Bag Yes No

Sample Temperature: 3 - 0/4 - C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0804138	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	RCRA metals 1,2,3,4,5			Air Bubbles (Y or N)
4.9.08	6:15pm	EP1-3	4oz/2	None	-1			X							X	X	X			
4.9.08	6:00pm	EP1-4	4oz/2	None	-2			X							X	X	X			
4.9.08	5:45pm	EP1-5	4oz/2	None	-3			X							X	X	X			
4.10.08	1525	AL1-1-HP	4oz/2	None	-4			X							X	X	X			
4.10.08	1622	AL1-2-HP	4oz/2	None	-5			X							X	X	X			
4.10.08	2:45pm	AL1-3-HP	4oz/2	None	-6			X							X	X	X			
4.10.08	1050	AL1-4-HP	4oz/2	None	-7			X							X	X	X			
4.10.08	1020	AL1-5-HP	4oz/2	None	-8			X							X	X	X			
4.10.08	1710	AL1-1-SS	4oz/2	None	-9			X							X	X	X			
4.10.08	1725	AL1-2-SS	4oz/2	None	-10			X							X	X	X			
4.10.08	1735	AL1-3-SS	4oz/2	None	-11			X							X	X	X			
4.10.08	1755	AL1-4-SS	4oz/2	None	-12			X							X	X	X			

Date:	Time:	Relinquished by:	Received by:	Remarks:
4/11/08	14:55		4/11/08 1455	
Date:	Time:	Relinquished by:	Received by:	

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

Chain-of-Custody Record

Client: Western Refining Co - Gallup
Address: Rout 3 Box 7 Gallup, NM 87301
Phone #: 505-722-3833
email or Fax#: 505-722-0210

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Evaporation Pond/Aeration Lagoon
Project #: 697-019-001
Project Manager: Regina Allen
Sampler: GP/SM
On Ice: ☒ Yes ☐ No
Sample Temperature: 4.5 - 0.1 = 4.4°C

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

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0804138	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	RCRA Metals 6010C				Air Bubbles (Y or N)
4.10.08	1800	AL1-SSS	4oz/2	None	-13			X							X	X	X				
4.9.08	7:10pm	EP1-6	4oz/2	None	-14			X							X	X	X				
4.9.08	7:35pm	EP1-7	4oz/2	None	-15			X							X	X	X				
4.9.08	7:17pm	EP1-8	4oz/2	None	-16			X							X	X	X				
4.9.08	1000	AL2-3-SS-MS	4oz/2	None	32 -17 4/11/08			X							X	X	X				
4.9.08	1000	AL2-3-SS-MSD	4oz/2	None	-32 -18 4/11/08			X							X	X	X				
4.9.08		BD-2	4oz/2	None	-19			X							X	X	X				
4.8.08		BD-1	4oz/2	None	-20			X							X	X	X				
55 4.8.08	1645	EB040808	40mL/3	HCl	-21										X						
4.10.08	735	EB040908	40mL/3	HCl	-22										X						
4.11.08	835	EB041008	40mL/3	HCl	-23										X						
		~~EB04~~ Trip Blank	40mL/2	HCl	-24			X							X	X	X				

Date:	Time:	Relinquished by:	Received by:
4/11/08	14:55		4/11/08 1455
Date:	Time:	Relinquished by:	Received by:

Remarks: 4/11/08

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Chain-of-Custody Record

Client: Western Refining Co - Gallup
Address: Route 3 Box 7
Gallup, NM 87301
Phone #: 505-722-3833
email or Fax#: 505-722-0210
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Evaporation Pond/Aeration Lagoon
Project #: 697-019-001
Project Manager: Regina Allen
Sampler: GP/SM
On Ice: ☒ Yes ☐ No
Sample Temperature: 5 on ice

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

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0804138	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	RCRA metals 1 and DC			Air Bubbles (Y or N)
4.8.08	1105	AL2-1-HP	4oz/2	None	-25			X							X	X	X			
4.8.08	1515	AL2-2-HP	4oz/2	None	-26			X							X	X	X			
4.8.08	1215	AL2-3-HP	4oz/2	None	-27			X							X	X	X			
4.8.08	1015	AL2-4-HP	4oz/2	None	-28			X							X	X	X			
4.9.08	820	AL2-5-HP	4oz/2	None	-29			X							X	X	X			
4.9.08	1040	AL2-1-SS	4oz/2	None	-30			X							X	X	X			
4.9.08	1555	AL2-2-SS	4oz/02	None	-31			X							X	X	X			
4.9.08	1000	AL2-3-SS	4oz/02	None	-32			X							X	X	X			
4.9.08	1025	AL2-4-SS	4oz/02	None	-33			X							X	X	X			
4.9.08	940	AL2-5-SS	4oz/02	None	-34			X							X	X	X			
4.9.08	6:25 pm	EP1-1	4oz/02	None	-35			X							X	X	X			
4.9.08	6:45 pm	EP1-2	4oz/02	None	-36			X							X	X	X			

Date:	Time:	Relinquished by:	Received by:
4/11/08	14:55		4/11/08 1455
Date:	Time:	Relinquished by:	Received by:

Remarks:

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

Hall Environmental Analysis Laboratory, Inc. Date: *21-May-08*

CLIENT: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon
Lab Order: 0804138

CASE NARRATIVE

Analytical notes:

Sample Analysis:
EPA method 8015B
"S" flags denote that the surrogate was not recoverable due to sample dilution and/or matrix interferences.

EPA method 8270B
"S" flags denote that the surrogate was low or not recoverable due to sample dilution and/or matrix interferences.

MS/MSD:
EPA Method 8015B, 8021B, 8270B
"S" flags denote that the recovery of the spiked compounds were poor due to dilution and matrix interferences. Several of the 8270B phenols were not recoverable due to high concentrations of petroleum hydrocarbons.

EPA Method 7471
Mercury was not recovered due to the high level of mercury in the sample. The amount that was spiked into the sample was diluted out by the x50 dilution.

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 0804138-32AMSD		*MSD*			Batch ID:	**15642**	Analysis Date:		4/18/2008 8:52:40 PM
Gasoline Range Organics (GRO)	661.2	mg/Kg	100	132	69.5	120	1.17	11.6	S
Sample ID: 0804138-32AMS		*MS*			Batch ID:	**15642**	Analysis Date:		4/18/2008 8:22:32 PM
Gasoline Range Organics (GRO)	669.0	mg/Kg	100	134	69.5	120			S
Method: EPA Method 8260B: VOLATILES									
Sample ID: 0804138-32A MSD		*MSD*			Batch ID:	**15642**	Analysis Date:		4/21/2008 12:01:13 PM
Benzene	6.620	mg/Kg	0.50	64.4	66.9	142	14.9	20	S
Toluene	14.54	mg/Kg	0.50	133	78.4	128	15.0	20	S
Chlorobenzene	2.917	mg/Kg	0.50	29.2	78.2	127	21.2	20	SR
1,1-Dichloroethene	4.283	mg/Kg	0.50	42.8	72.6	150	29.8	20	SR
Trichloroethene (TCE)	2.718	mg/Kg	0.50	27.2	72.2	120	33.8	20	SR
Sample ID: 0804138-32A MS		*MS*			Batch ID:	**15642**	Analysis Date:		4/21/2008 11:25:48 AM
Benzene	5.700	mg/Kg	0.50	55.2	66.9	142			S
Toluene	12.52	mg/Kg	0.50	113	78.4	128			
Chlorobenzene	2.358	mg/Kg	0.50	23.6	78.2	127			S
1,1-Dichloroethene	3.172	mg/Kg	0.50	31.7	72.6	150			S
Trichloroethene (TCE)	1.932	mg/Kg	0.50	19.3	72.2	120			S

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: 0804138-01B		*MSD*			Batch ID:	**15669**	Analysis Date:		4/17/2008
Acenaphthene	37.35	mg/Kg	0.10	149	24	125	20.5	30	S
4-Chloro-3-methylphenol	42.35	mg/Kg	0.10	84.8	14.6	154	18.7	30	
2-Chlorophenol	37.45	mg/Kg	0.10	75.0	13.3	149	9.36	30	
1,4-Dichlorobenzene	20.20	mg/Kg	0.10	80.6	23.6	118	5.08	30	
2,4-Dinitrotoluene	ND	mg/Kg	0.10	0	28	136	0	30	S
N-Nitrosodi-n-propylamine	ND	mg/Kg	0.10	0	28	114	0	30	S
4-Nitrophenol	ND	mg/Kg	0.10	0	13.1	150	0	0	S
Pentachlorophenol	ND	mg/Kg	0.33	0	20.1	139	0	30	S
Phenol	42.30	mg/Kg	0.10	72.5	17.3	141	7.48	30	
Pyrene	58.90	mg/Kg	0.10	142	29	131	6.30	30	S
1,2,4-Trichlorobenzene	18.25	mg/Kg	0.10	72.9	17.9	126	1.90	30	
Sample ID: 0804138-32Bmsd		*MSD*			Batch ID:	**15682**	Analysis Date:		4/20/2008
Acenaphthene	ND	mg/Kg	15	51.5	24	125	0	30	
4-Chloro-3-methylphenol	37.65	mg/Kg	15	75.4	14.6	154	9.17	30	
2-Chlorophenol	33.65	mg/Kg	15	67.4	13.3	149	3.48	30	
1,4-Dichlorobenzene	19.25	mg/Kg	15	76.8	23.6	118	6.43	30	
2,4-Dinitrotoluene	ND	mg/Kg	15	0	28	136	0	30	S
N-Nitrosodi-n-propylamine	ND	mg/Kg	15	0	28	114	0	30	S
4-Nitrophenol	ND	mg/Kg	15	0	13.1	150	0	0	S
Pentachlorophenol	ND	mg/Kg	50	0	20.1	139	0	30	S
Phenol	40.45	mg/Kg	15	65.3	17.3	141	0.739	30	
Pyrene	42.45	mg/Kg	15	-17.4	29	131	51.3	30	SR
1,2,4-Trichlorobenzene	17.55	mg/Kg	15	70.1	17.9	126	0.284	30	
Sample ID: 0804138-01B		*MS*			Batch ID:	**15669**	Analysis Date:		4/17/2008
Acenaphthene	30.40	mg/Kg	0.10	121	24	125			
4-Chloro-3-methylphenol	35.10	mg/Kg	0.10	70.3	14.6	154			
2-Chlorophenol	34.10	mg/Kg	0.10	68.3	13.3	149			
1,4-Dichlorobenzene	19.20	mg/Kg	0.10	76.6	23.6	118			
2,4-Dinitrotoluene	ND	mg/Kg	0.10	0	28	136			S
N-Nitrosodi-n-propylamine	ND	mg/Kg	0.10	0	28	114			S
4-Nitrophenol	ND	mg/Kg	0.10	0	13.1	150			S
Pentachlorophenol	ND	mg/Kg	0.33	0	20.1	139			S
Phenol	39.25	mg/Kg	0.10	66.4	17.3	141			
Pyrene	55.30	mg/Kg	0.10	127	29	131			
1,2,4-Trichlorobenzene	18.60	mg/Kg	0.10	74.3	17.9	126			
Sample ID: 0804138-32Bms		*MS*			Batch ID:	**15682**	Analysis Date:		4/20/2008
Acenaphthene	32.40	mg/Kg	15	129	24	125			S
4-Chloro-3-methylphenol	34.35	mg/Kg	15	68.8	14.6	154			
2-Chlorophenol	32.50	mg/Kg	15	65.1	13.3	149			
1,4-Dichlorobenzene	18.05	mg/Kg	15	72.1	23.6	118			
2,4-Dinitrotoluene	ND	mg/Kg	15	0	28	136			S
N-Nitrosodi-n-propylamine	ND	mg/Kg	15	0	28	114			S
4-Nitrophenol	ND	mg/Kg	15	0	13.1	150			S

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Evaporation Pond/Aeration Lagoon **Work Order:** 0804138

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: 0804138-32Bms		*MS*			Batch ID:	**15682**	Analysis Date:		4/20/2008
Pentachlorophenol	ND	mg/Kg	50	0	20.1	139			S
Phenol	40.75	mg/Kg	15	65.9	17.3	141			
Pyrene	71.75	mg/Kg	15	99.6	29	131			
1,2,4-Trichlorobenzene	17.60	mg/Kg	15	70.3	17.9	126			
Method: EPA Method 7471: Mercury									
Sample ID: 0804138-32BMSD X		*MSD*			Batch ID:	**15767**	Analysis Date:		4/28/2008 3:51:41 PM
Mercury	8.503	mg/Kg	1.6	-253	75	125	4.10	20	S
Sample ID: 0804138-32BMS X60		*MS*			Batch ID:	**15767**	Analysis Date:		4/28/2008 3:45:08 PM
Mercury	8.162	mg/Kg	1.6	-462	75	125			S
Method: EPA Method 6010B: Soil Metals									
Sample ID: 0804138-32BMSD		*MSD*			Batch ID:	**15708**	Analysis Date:		4/23/2008 9:09:58 AM
Arsenic	31.49	mg/Kg	2.5	93.1	75	125	5.64	30	
Cadmium	23.47	mg/Kg	0.10	93.0	75	125	0.505	30	
Chromium	34.79	mg/Kg	0.30	85.4	75	125	0.167	30	
Selenium	22.76	mg/Kg	2.5	91.8	75	125	3.07	30	
Sample ID: 0804138-32BMS		*MS*			Batch ID:	**15708**	Analysis Date:		4/23/2008 9:07:19 AM
Arsenic	33.32	mg/Kg	2.5	102	75	125			
Cadmium	23.59	mg/Kg	0.10	95.0	75	125			
Chromium	34.73	mg/Kg	0.30	86.5	75	125			
Selenium	23.47	mg/Kg	2.5	96.3	75	125			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

APPENDIX D

DATA VALIDATIONS

Tier II Data Validation Report Summary

Client: Western Refining Southwest, Gallup	Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Project Name: Evaporation Pond/Aeration Lagoon	Sample Matrix: Soil
Project Number: 072-697-016	Sample Start Date: April 8, 2008
Date Validated: May 21, 2008	Sample End Date: April 11, 2008
Parameters Included: TPH Method 8015B for Gasoline and Diesel, VOCs by 8260B, SVOCs by 8270C, and RCRA Metals by 6010B	
Laboratory Project IDs: 0804138	
Data Validator's Name: Christina Hiegel, Civil Engineer	

DATA EVALUATION CRITERIA SUMMARY

A Tier II Data Validation was performed by Trihydro Corporation's Chemical Data Evaluation Services group on the analytical data report package generated by Hall Environmental Analysis Laboratory evaluating samples from Western Refining Southwest, Gallup, New Mexico.

Precision, accuracy, method compliance, and completeness of this data package were assessed during this data review. Precision was determined by evaluating the calculated RPD values of samples from field duplicates pairs and laboratory duplicates pairs. Laboratory accuracy was established by reviewing the demonstrated laboratory control samples (LCS) and matrix spike recoveries (MS/MSD) to verify that none of the data were biased. Additionally, field accuracy was established by collecting field and trip blanks to monitor for possible ambient or cross contamination during sampling. Method compliance was established by reviewing holding times, detection limits, surrogate recoveries, method blanks, and laboratory control samples against method specific requirements. Completeness was evaluated by determining the overall ratio of the number of samples planned versus the number of samples with valid analyses. Determination of completeness included a review of the chain-of-custody, laboratory analytical methods, and any other necessary documents associated with this analytical data set.

Data were evaluated in general accordance with validation criteria set forth in the USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Superfund Organic Methods Data Review, document number USEPA-540-R-07-003, July 2007 with additional reference to USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review, document number EPA 540/R-99-008 of October 1999 and the USEPA CLP National Functional Guidelines for Inorganic Data Review, document number EPA 540R-04-004, October 2004. Review of duplicates is conducted in accordance with USEPA Region 1 Laboratory Data Validation Function Guidelines for Evaluation of Organic Analysis, December 1996.

SAMPLE NUMBERS TABLE

Client Sample ID	Laboratory Sample Number
EP1-3	0804138-01
EP1-4	0804138-02
EP1-5	0804138-03
AL1-1-HP	0804138-04
AL1-2-HP	0804138-05
AL1-3-HP	0804138-06
AL1-4-HP	0804138-07
AL1-5-HP	0804138-08
AL1-1-SS	0804138-09
AL1-2-SS	0804138-10
AL1-3-SS	0804138-11
AL1-4-SS	0804138-12
AL1-5-SS	0804138-13
EP1-6	0804138-14
EP1-7	0804138-15
EP1-8	0804138-16
BD-2	0804138-19

Tier II Data Validation Report Summary

Client Sample ID	Laboratory Sample Number
BD-1	0804138-20
EB040808	0804138-21
EB040908	0804138-22
EB041008	0804138-23
Trip Blank	0804138-24
AL2-1-HP	0804138-25
AL2-2-HP	0804138-26
AL2-3-HP	0804138-27
AL2-4-HP	0804138-28
AL2-5-HP	0804138-29
AL2-1-SS	0804138-30
AL2-2-SS	0804138-31
AL2-3-SS	0804138-32
AL2-4-SS	0804138-33
AL2-5-SS	0804138-34
EP1-1	0804138-35
EP1-2	0804138-36

Tier II Data Validation Report

The samples were analyzed for client-specified analytes. Chain-of-Custody (COC) completeness is included in Section #2. The laboratory data were reviewed to evaluate compliance with the required methods and the quality of the reported data. A leading check mark (✓) indicates that the referenced data were deemed acceptable. A preceding crossed circle (⊗) signifies problems with the referenced data that may have warranted attaching qualifiers to the data.

- ✓ Data Completeness
- ✓ COC Documentation
- ✓ Holding Times and Preservation
- ✓ Laboratory Blanks
- ✓ Laboratory Control Samples (LCS/LCSD)
- ⊗ System Monitoring Compounds (Surrogates)
- ⊗ Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ⊗ Field Duplicates
- ✓ Laboratory Duplicate
- ✓ Field Blanks

OVERALL DATA PACKAGE ASSESSMENT

Based on a data validation review, the data are acceptable as delivered. Data qualified by the laboratory are discussed in Section #9.

The purpose of validating data and assigning qualifiers is to assist in proper data interpretation. Data which are not qualified meet the site data quality objectives. If values are assigned a "J" or "UJ" qualifier, the data may be used for site evaluation, with the reasons for qualification being given consideration when interpreting sample concentrations. Data points which are assigned an "R" qualifier should not be used for any site evaluation purposes.

Data Completeness

The analyses appeared to be performed as requested on the chain-of-custody records. The associated samples were received by the laboratory and appeared to be analyzed properly. No data points were rejected. Completeness of the data are calculated to be 100%

Validation Criteria Checklist	
Data validation qualifiers applied to data as a result of this review: J – Estimated value; UJ – Estimated reporting limit; JB – Estimated value due to blank detection.	
1. Did the laboratory identify any non-conformances related to the analytical data?	Yes
Comments: The laboratory noted that for Method 8015B, the "S" flag denotes that the surrogate was not recoverable due to sample dilution and/or matrix interferences. The laboratory noted that for Method 8270B, the "S" flag denotes that the surrogate was low or not recoverable due to sample dilution and or matrix interferences. For the MS/MSD by method 8015B, 8021B, and 8270B, the "S" flags denote that the recovery of spiked compounds were poor due to dilution and matrix interferences. Several of the 8270B phenols were not recoverable due to high concentrations of petroleum hydrocarbons. For Mercury by Method 7471, mercury was not recovered due to the high level of mercury in the sample. The amount that was spiked into the sample was diluted out by the 50 times dilution.	
2. Were sample chain-of-custody (COC) forms complete?	Yes
Comments: The COC forms, from field to laboratory, were complete, and custody was maintained as evidenced by field and laboratory personnel signatures, dates, and times of receipt. The Tier 1 validator indicated that analyses were correct.	
3. Were detection limits in accordance with the QAPP, permit, or method, or indicated as acceptable by the Tier 1 validator?	Yes
Comments: Several dilutions were required by the laboratory. Samples appeared to be diluted acceptably and no data will be qualified as a result of this review. Final useability of data with regards to dilutions will be determined by the project manager.	
4. Were the requested analytical methods in compliance with the QAPP, permit, or COC?	Yes
Comments: Analytical methods appeared to be acceptable and were verified during the Tier 1 validation.	
5. Were samples received in good condition within method specified requirements?	Yes
Comments: Samples were received on ice, intact, and in good condition with a cooler temperature within the 4°C +/- 2°C acceptance range at 3°C.	
6. Were samples analyzed within method specified or technical holding times?	Yes
Comments: Method specified holding times were met for the analyses reported.	
7. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?	Yes
Comments: Sample results were reported in units of mg/kg, which are acceptable units for the soil matrix.	
8. Do the laboratory reports include all constituents requested to be reported as indicated by the Tier 1 validator?	Yes
Comments: Reported constituents were in accordance with those requested and are acceptable according to the Tier 1 validator.	
9. Were data qualification flags used by the laboratory?	Yes
Comments: Data were qualified with the laboratory using an S or and SR. The S flag indicates that the spike recovery was outside accepted recovery limits. The R flag indicates that the RPD was outside of acceptable recovery limits.	
10. Was there indication from the laboratory that the initial or continuous calibration verification results were within acceptable limits?	N/A
Comments: Initial and continuing calibration data were not included as part of this data set; however, these data are assumed to be acceptable as the laboratory did not note that any calibration verification results were outside acceptable limits.	
11. Was the total number of method blank samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?	Yes
Comments: One method blank was analyzed for each batch.	
12. Were method blank detections reported for this data set?	No
Comments: No method blank detections were reported with this data set.	

13. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method? Yes

Comments: One MS/MSD was analyzed for GRO batch 15642, VOC batch 15642, mercury batch 15767, and metals batch 15708 and was prepared from sample AL2-3-SS. Additionally, an MS/MSD was analyzed for semi-volatiles batch 15669 and 15682 and was prepared from sample EP1-3 and AL2-3-SS, respectively.

14. Were matrix spike recoveries within laboratory-specified limits? No

Comments: Matrix spike recoveries were outside of acceptable limits for most batches and analytes. For GRO batch 15642, the MS and MSD were outside of acceptable limits at 132% and 134% where the acceptable range is 69.5-120%. As a result, all GRO detections will be qualified.

For semivolatiles batch 15669, several MS/MSD recoveries were outside of acceptable limits including acenaphthene (149%-MSD; acceptable range 24-125%), 2,4-dinitrotoluene (0% and 0%; acceptable range 28-136%), N-nitrosodi-n-propylamine (0% and 0%; acceptable range 28-114%), 4-nitrophenol ((0% and 0%; acceptable range 13.1-150%), pentachlorophenol (0% and 0%; acceptable range 20.1-139%). Additionally, in batch 15682, several MS/MSD recoveries were outside of acceptable limits including acenaphthene (129%-MS; acceptable range 24-125%), 2,4-dinitrotoluene (0% and 0%; acceptable range 28-136%), N-nitrosodi-n-propylamine (0% and 0%; acceptable range 28-114%), 4-nitrophenol ((0% and 0%; acceptable range 13.1-150%), pentachlorophenol (0% and 0%; acceptable range 20.1-135%), and pyrene (-17.1%; acceptable range 29-131%). Additional the RPD for pyrene was 51.3%, which was greater than the acceptable RPD of 30%. Due to most SVOC MS/MSD recoveries being outside of acceptable limits, all SVOC results will be qualified.

For mercury batch 15767, the surrogate recoveries were -462% and -253% where the acceptable range is 75-125%. Due to matrix interferences for mercury, all mercury data will be qualified.

For VOC batch 15642, the MS/MSD recoveries for benzene (55.2% and 64.4%; acceptable range 66.9%-142%), toluene (133%-MSD; acceptable range 78.4-128%), chlorobenzene (23.6% and 29.2%; acceptable range 78.2-127%), 1,1-dichloroethene (31.7% and 42.8%; acceptable range 72.6-150%), and trichloroethene (19.3% and 27.2%; acceptable range 72.2-120%) were outside of acceptable limits. Additionally, the RPD values for chlorobenzene (21.2%), 1,1-dichloroethene (29.8%), and trichloroethene (33.8%) were above the upper RPD limit of 20%. For VOCs, due to most recoveries being outside of acceptable limits, all VOC results will be qualified.

15. Was the total number of laboratory control samples analyzed equal to at least 5% of the total number of samples, or analyzed as required by the method? Yes

Comments: Laboratory control samples were analyzed for each batch.

16. Were laboratory control recoveries within laboratory-specified limits? Yes

Comments: The laboratory control recoveries were within specified limits.

17. Were surrogate recoveries within laboratory control limits? No

Comments: Surrogate recoveries for several samples were outside of acceptable recovery ranges. For Method 8015B and analyses of DRO, the laboratory reported 0% recovery (acceptable range 61.7%-135%) for all samples. No data will be qualified since discussions with the laboratory indicated that the surrogates were diluted out.

For sample EP1-2, the semivolatile (SVOC) surrogate for 4-terphenyl-d14 (160%; acceptable range 34.6-151%) was above acceptable limits. For sample EP1-1, the SVOC surrogate 2,4,6-tribromophenol was outside of acceptable limits (28.9%; acceptable range 35.5-141%). For sample AL2-5-SS, the surrogate 2,4,6-tribromophenol was outside of acceptable limits (12.3%; acceptable range 35.5-141%). For sample BD-1, the surrogate 2,4,6-tribromophenol was outside of acceptable limits (30.1%; acceptable range 35.5-141%). For sample EP1-7, the SVOC surrogate 2,4,6-tribromophenol was outside of acceptable limits (33.5%; acceptable range 35.5-141%). Lastly for sample AL1-4-SS, the SVOC surrogate 2,4,6-tribromophenol was outside of acceptable limits (34.3%; acceptable range 35.5-141%). For these samples, only one out of six surrogates was outside of acceptable limits; therefore, no qualification is required.

For sample AL1-5-SS for SVOCs, the surrogate 2,4,6-tribromophenol was outside of acceptable limits (21.9%; acceptable range 35.5-141%) and the surrogate 4-terphenyl-d14 was outside of acceptable limits (33.5%; acceptable range 34.6-151%). For sample BD-2, the surrogate 2,4,6-tribromophenol was outside of acceptable limits (19.9%; acceptable range 35.5-141%) and the surrogate 2-fluorobiphenyl was outside of acceptable limits (0%; acceptable range 30.4-128%). Lastly, for sample AL2-3-SS, the surrogate 2,4,6-tribromophenol was outside of acceptable limits (25.9%; acceptable range 35.5-141%) and the surrogate 4-terphenyl-d14 was outside of acceptable limits (31.7%; acceptable range 34.6-151%). In each case, one out of range surrogate was an acid and the other was a base/neutral. No data were qualified since the other two acid surrogates and other two base/neutral surrogates were within acceptable limits.

For sample AL2-2-SS for VOCs, the surrogate 4-bromofluorobenzene was recovered slightly below (79.2%) the lower recovery range of 79.3-126%. As a result, the detected and non-detected VOC values for this sample will be qualified as J/UJ.

18. Was the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project guidelines, QAPP, SAP, or permit, or as indicated by the Tier 1 validator?	Yes
Comments: Three equipment blanks and one trip blank were collected and reported with these samples. Therefore, blanks were collected on a 10% basis.	
19. Were detections found in trip blanks, equipment blanks, or field blanks?	No
Comments: No detections were found in the blanks.	
20. Was the number of field duplicates collected equal to at least 10% of the total number of samples, or as required by the project guidelines, QAPP, SAP, or permit, or as indicated by the Tier 1 validator?	Yes
Comments: Sample BD-1 is a duplicate of AL2-2-SS and BD-2 is a duplicate of AL2-4-SS.	
21. Were field duplicate RPD values less than the upper RPD limit (soil [50%], water [30%], or air/vapor [25%]), as specified by the laboratory or method?	Yes
Comments: Most RPD values were acceptable with the exception of the RPD for 2-methylnaphthalene (Method 8270C) between AL2-4-SS and BD-2. As a result, all 2-methylnaphthalene was qualified. The other associated RPD values were acceptable.	
22. Were laboratory duplicate RPD values within laboratory-specified limits?	N/A
Comments: Laboratory duplicates were not reported by the laboratory.	
23. General Comments: The analyses were reported as being acceptable by the laboratory.	

Table 1. Qualification Summary, Western Refining Southwest, Gallup, New Mexico (0804138)

Analyte	Client Sample ID	Laboratory Assigned ID	Laboratory Result	Reviewer Qualifier	Reason for Qualification
Gasoline Range Organics	All Samples	All Samples	Detections	J	High MS and MSD results indicating a possible high bias
2-Methylnaphthalene (Method 8270C)	All Samples	All Samples	Detections/Non-Detections	J/UJ	High RPD (>100%) in the duplicate indicating poor repeatability
VOCs	AL2-2-SS	0804138-31	Detections/Non-Detections	J/UJ	Low surrogate recovery
VOCs	All Samples	All Samples	Detections/Non-Detections	J/UJ	Severe Matrix Interference
SVOCs	All Samples	All Samples	Detections/Non-Detections	J/UJ	Severe Matrix Interference
Mercury	All Samples	All Samples	Detections/Non-Detections	J/UJ	Severe Matrix Interference

J – Indicates estimated detection.
UJ – Indicates estimated detection below the reporting limit.

Table 2. Field Duplicate Summary, Western Refining Southwest, Gallup, New Mexico (0804138)

Parent Sample: AL2-2-SS / Duplicate Sample: BD-1			
Analyte	**Laboratory Result (mg/kg)**	**Duplicate Result (mg/kg)**	**Relative Percent Difference (RPD)**
Diesel Range Organics	260000	220000	16.7%
Motor Oil Organics	31000	ND(25000)	DL
Mercury	6.8	11	47.2%
Arsenic	13	12	8.0%
Barium	500	420	17.4%
Cadmium	0.32	0.46	35.9%
Chromium	21	22	4.7%
Lead	24	26	8.0%
Chrysene	ND(30)	48	DL
Fluorene	98	100	2.0%
2-Methylnaphthalene – 8270C	450	540	18.2%
3,4-methylphenol	ND(30)	30	DL
Naphthalene	38	48	23.3%
Phenanthrene	230	300	26.4%
Pyrene	ND(30)	56	DL
Toluene	2.1	1.3	47.1%
Ethylbenzene	0.72	ND(0.5)	DL
1,2,4-Trimethylbenzene	4.5	2.9	43.2%
1,3,5-Trimethylbenzene	1.1	0.61	57.3%*
Naphthalene	5.8	5.1	12.8%
1-Methylnaphthalene - 8260	26	23	12.2%
2-Methylnaphthalene - 8260	37	34	8.5%
n-Butylbenzene	1.0	0.65	42.4%
Xylenes	4.9	3.1	45.0%

Field duplicate RPD control limits should not exceed 30% for water, 50% for soil, or 25% for air or vapor as established by USEPA Region 1 Laboratory Data Validation Function Guidelines for Evaluation of Organic Analysis, December 1996.

DL – indicates that one result was detected and the other was non-detect. For the DL noted values, the detected value was within 2x the reporting limit and no qualification was required.
* - Indicates that one or both of the determinations was less than five times the reporting limit and a valid RPD could not be calculated; therefore, no data will be qualified.

Parent Sample: AL2-4-SS / Duplicate Sample: BD-2			
Analyte	**Laboratory Result (mg/kg)**	**Duplicate Result (mg/kg)**	**Relative Percent Difference (RPD)**
Diesel Range Organics	250000	350000	33.3%
Motor Oil Organics	35000	52000	39.1%
Mercury	8.1	5.5	38.2%
Arsenic	14	14	0.0%
Barium	190	210	10.0%
Cadmium	0.42	0.4	4.9%
Chromium	16	16	0.0%
Lead	32	29	9.8%
Chrysene	ND(30)	49	DL
Dibenzofuran	ND(30)	36	DL
Fluorene	44	130	98.9%*
2-Methylnaphthalene – 8270C	**190**	**640**	**108.4%**
3,4-methylphenol	ND(30)	35	DL
Naphthalene	44	67	41.4%
Phenanthrene	210	310	38.5%
Pyrene	ND(30)	51	DL
Toluene	1.6	1.2	28.6%
Ethylbenzene	0.56	ND(0.5)	DL
1,2,4-Trimethylbenzene	4.1	3.6	13.0%
1,3,5-Trimethylbenzene	0.72	0.56	25.0%
Naphthalene	5.4	4.1	27.4%
1-Methylnaphthalene - 8260	24	21	13.3%
2-Methylnaphthalene - 8260	30	24	22.2%
n-Butylbenzene	1.1	0.72	41.8%
Xylenes	4.0	3.1	25.4%

Field duplicate RPD control limits should not exceed 30% for water, 50% for soil, or 25% for air or vapor as established by USEPA Region 1 Laboratory Data Validation Function Guidelines for Evaluation of Organic Analysis, December 1996.

DL – indicates that one result was detected and the other was non-detect. For the DL noted values, the detected value was within 2x the reporting limit and no qualification was required.
* - Indicates that one or both of the determinations was less than five times the reporting limit and a valid RPD could not be calculated; therefore, no data will be qualified.

APPENDIX E

SURVCAD VOLUME CALCULATIONS

072SediVols200805-Vol-AL1-HP-SS

Volume Report Aeration Lagoon 1 Soft Sediment 5/30/2008 10:51

Comparing GRiD file:
H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/AL1-HP.grd
and GRiD file: H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/AL1-SS.grd

Grid corner locations: 6164.05,4854.71 to 6328.05,5025.71

Grid resolution X: 164, Y: 171 Grid cell size X: 1.00, Y: 1.00

Area in Cut : 0.0 S.F., 0.00 Acres

Area in Fill: 12,324.8 S.F., 0.28 Acres

Total inclusion area: 12,324.8 S.F., 0.28 Acres

Cut to Fill ratio: 0.00

Average Fill Depth: 3.21

Max Fill Depth: 5.88

Cut (C.Y.) / Area (acres): 0.00

Fill (C.Y.) / Area (acres): 5173.59

Cut volume: 0.0 C.F., 0.00 C.Y.

Fill volume: 39,522.8 C.F., 1,463.81 C.Y.

072SediVols200805-Vol-AL1-TD-HP

Volume Report Aeration Lagoon 1 Hardpack Sediment 5/30/2008 10:50

Comparing GRiD file:
H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/AL1-TD.grd
and GRiD file: H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/AL1-HP.grd

Grid corner locations: 6164.05,4854.71 to 6328.05,5025.71

Grid resolution X: 164, Y: 171 Grid cell size X: 1.00, Y: 1.00

Area in Cut : 0.0 S.F., 0.00 Acres

Area in Fill: 12,324.8 S.F., 0.28 Acres

Total inclusion area: 12,324.8 S.F., 0.28 Acres

Cut to Fill ratio: 0.00

Average Fill Depth: 0.50

Max Fill Depth: 2.47

Cut (C.Y.) / Area (acres): 0.00

Fill (C.Y.) / Area (acres): 808.43

Cut volume: 0.0 C.F., 0.00 C.Y.

Fill volume: 6,175.9 C.F., 228.74 C.Y.

072SediVols200805-Vol-AL2-HP-SS

Volume Report Aeration Lagoon 2 Soft Sediment 5/30/2008 10:49

Comparing GRiD file:
H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/AL2-HP.grd
and GRiD file: H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/AL2-SS.grd

Grid corner locations: 5968.13,4838.96 to 6183.13,5067.96

Grid resolution X: 215, Y: 229 Grid cell size X: 1.00, Y: 1.00

Area in Cut : 0.0 S.F., 0.00 Acres

Area in Fill: 19,902.8 S.F., 0.46 Acres

Total inclusion area: 19,902.8 S.F., 0.46 Acres

Cut to Fill ratio: 0.00

Average Fill Depth: 4.62

Max Fill Depth: 8.50

Cut (C.Y.) / Area (acres): 0.00

Fill (C.Y.) / Area (acres): 7450.55

Cut volume: 0.0 C.F., 0.00 C.Y.

Fill volume: 91,913.4 C.F., 3,404.20 C.Y.

072SediVols200805-Vol-AL2-TD-HP

Volume Report Aeration Lagoon 2 Hardpack Sediment 5/30/2008 10:47

Comparing GRiD file:
H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/AL2-TD.grd
and GRiD file: H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/AL2-HP.grd

Grid corner locations: 5968.13,4838.96 to 6183.13,5067.96

Grid resolution X: 215, Y: 229 Grid cell size X: 1.00, Y: 1.00

Area in Cut : 0.0 S.F., 0.00 Acres

Area in Fill: 19,902.8 S.F., 0.46 Acres

Total inclusion area: 19,902.8 S.F., 0.46 Acres

Cut to Fill ratio: 0.00

Average Fill Depth: 0.58

Max Fill Depth: 2.09

Cut (C.Y.) / Area (acres): 0.00

Fill (C.Y.) / Area (acres): 940.99

Cut volume: 0.0 C.F., 0.00 C.Y.

Fill volume: 11,608.5 C.F., 429.95 C.Y.

072SediVols200805-Vol-EP1-SS-TD

Volume Report Evaporation Pond 1 5/30/2008 11:03

Comparing GRiD file:
H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/EP1-TD.grd
and GRiD file: H:/Projects/WesternRefining/Gallup/072-697-016/CADD/SurvCadData/EP1-SS.grd

Grid corner locations: 5981.50,5014.46 to 6297.50,5341.46

Grid resolution X: 316, Y: 327 Grid cell size X: 1.00, Y: 1.00

Area in Cut : 0.0 S.F., 0.00 Acres

Area in Fill: 53,891.7 S.F., 1.24 Acres

Total inclusion area: 53,891.7 S.F., 1.24 Acres

Cut to Fill ratio: 0.00

Average Fill Depth: 1.59

Max Fill Depth: 5.04

Cut (C.Y.) / Area (acres): 0.00

Fill (C.Y.) / Area (acres): 2568.95

Cut volume: 0.0 C.F., 0.00 C.Y.

Fill volume: 85,813.1 C.F., 3,178.26 C.Y.

Appendix B

Field Methods

Field Methods

Pursuant to the Investigation Work Plans for SWMU No.1 and No. 14, an investigation of soils and groundwater was conducted to determine and evaluate the presence, nature, extent, fate, and transport of contaminants. To accomplish this objective, soil borings and monitoring wells were installed at the Aeration Basin and Old API Separator. The field methods are described below and individual discussions are presented for the following activities:

- Drilling procedures;
- Soil screening;
- Decontamination procedures;
- Monitoring well development;
- Fluid level measurements;
- Purging of monitoring wells/groundwater sample collection;
- Sample collection and handling procedures;
- Vadose zone vapor sampling;
- Equipment calibration; and
- Management of investigation derived waste.

Drilling Procedures

The soil borings were drilled using the hollow-stem auger (HSA) method or a hand auger was used for shallow (two-foot) borings. Soil samples were collected continuously and logged by a qualified geologist in accordance with the Unified Soil Classification System (USCS) nomenclature. As shown on the boring logs, the data recorded included the lithologic interval, symbol, percent recovery, field screening results, and a sample description of the cuttings and core samples.

Soil Screening

Samples obtained from the borings were screened in the field on 2-foot intervals for evidence of contaminants. Field screening results were recorded on the soil boring logs. Field screening results were used to aid in the selection of soil samples for laboratory analysis. The primary screening methods include: (1) visual examination, (2) olfactory examination, and (3) headspace vapor screening for volatile organic compounds.

Visual screening included examining the soil samples for evidence of staining caused by petroleum-related compounds or other substances that may have caused staining of soils such as elemental sulfur or cyanide compounds. Headspace vapor screening was conducted and involved placing a soil sample in a plastic sealable bag allowing space for ambient air. The bag was sealed, labeled and then shaken gently to expose the soil to the air trapped in the

container. The sealed bag was allowed to rest for a minimum of 5 minutes while the vapors equilibrated. Vapors present within the sample bag's headspace were then measured by inserting the probe of a MiniRae 2000 portable volatile organic constituent (VOC) monitor in a small opening in the bag. The maximum value and the ambient air temperature were recorded on the field boring log for each sample. The screening results are presented in Table 3. Field screening results and any conditions that were considered to be capable of influencing the results of the field screening were recorded on the field logs.

Decontamination Procedures

The drilling equipment (e.g., hollow-stem augers) was decontaminated between each borehole using a high pressure potable water wash. The sampling equipment coming in direct contact with the samples (e.g., hand augers and split-spoon samplers) were decontaminated using a brush, as necessary, to remove larger particulate matter followed by a rinse with potable water, wash with nonphosphate detergent, rinse with potable water, and double rinse with deionized water. In the event that more than one SWMU was investigated during the day a new batch of wash water and rinse water was prepared prior to decontamination.

Monitoring Well Development

Following monitoring well completion activities, the new monitoring well (OAPIS-1) was developed using a bailer. Using a bailer attached to the end of the clean rope, groundwater was forced to flow in and out of the well screen by the repeated upward and downward motion of the bailer along the entire length of the well screen. The repeated plunging motion drew filter pack fines and loosened sediment into the well casing, improving the water quality within the surrounding formation and filter pack.

Once the well was surged for a minimum of 10 minutes, the groundwater/sediment was removed and discharged directly into a 55-gallon drum. A glass jar was used to capture a sample of the purge water to monitor the improving clarity of the purge water. Bailing ceased once the purge water was relatively clear.

Due to the very slow recovery rates and small volume of water accumulating in temporary well completions, these wells were not developed following the normal procedures for permanent monitoring wells.

Fluid Level Measurements

The depth to separate phase hydrocarbon, if present, and groundwater was measured prior to purging the wells of potentially stagnant groundwater. The measurements are presented in Table 12. A Geotech Interface Probe was used to measure fluid levels to 0.01 foot.

Purging of Monitoring Wells/Groundwater Sample Collection

The permanent monitoring well (OAPIS-1) was purged of a minimum of three well volumes prior to sample collection. The purge volumes are calculated as follows:

Volume (gallons) = water column thickness (ft) x 3.14 x radius of well casing^2 (ft) x 7.48 (gals/ft). The calculated purge volumes and actual volumes removed from each well are presented below.

Well (date)	Water Column Thickness (ft)	Calculated Purge Volume (gallons) – 3 Well Volumes	Actual Purge Volume (gallons)
OAPIS-1 (10/15/2012)	17.95	9.15	9.25

Field measurements of groundwater stabilization parameters included pH, specific conductance, dissolved oxygen concentrations, oxidation-reduction potential, and temperature. These measurements are presented in Table 11. A disposable bailer was used to remove groundwater from the well during the purging procedures. Due to the very slow recovery rates and small volume of water accumulating in the temporary well completions, the temporary wells were not purged prior to sample collection with a disposable bailer.

Sample Collection and Handling Procedures

Soil samples were collected using split-spoon samplers or directly from the auger bucket for borings completed with a hand auger. The selected portion of the sample interval was placed in pre-cleaned, laboratory-prepared sample containers for laboratory chemical analysis. Three soil samples were collected for VOC analysis. An Encore® Sampler was used for collection of soil samples for low-level VOC analysis pursuant to EPA method 5035; the second sample aliquot (approximately 1 gram) was placed in a laboratory-prepared container with a methanol preservative; and the third sample aliquot was placed in an 8-ounce glass jar, which was filled to the top to minimize any head space.

Groundwater samples were collected with disposable bailers and immediately poured directly into clean laboratory supplied sample containers with the exception of samples collected for dissolved

analyses. Samples specified for dissolved analyses were filtered in the field using a disposable 0.45 micron filter. A new filter and syringe enclosure were used for each sample. All samples were immediately placed into an ice chest with ice. The samples were maintained in the custody of the sampler until the chain-of-custody form was completed and the ice chest was sealed for shipment to the laboratory.

Equipment Calibration

Soil vapor screening was conducted using a MiniRae 2000 portable VOC monitor. The instrument was calibrated at the beginning of each work day to a concentration of 100 ppm isobutylene.

The instruments used to measured groundwater stabilization parameters included a YSI 650 MDS Data Logger and YSI 600 XLM-M Sonde. The calibration solutions used at the beginning of each day are as follows:

- 4.0 pH solution;
- 7.0 pH solution; and
- 1.413 mS/cm conductivity solution.

Management of Investigation Derived Waste

The decontamination water from the drilling equipment was collected on a mobile decon trailer and was subsequently placed in open top 55-gallon drums, which were sealed at the end of each work day. The decontamination water generated from sampling equipment was collected in buckets and placed in open top 55-gallon drums, which were sealed at the end of each work day. Purge water was also collected in a 55-gallon drum. The decon and purge water was disposed in the Refinery's wastewater treatment system up-stream of the API Separator. Soil cuttings were also placed into open top 55-gallon drums and were sealed when not in use. Each drum of soils was labeled and temporarily stored in a concrete curbed area pending waste characterization and disposal.

Appendix C

Site-Specific Dilution/Attenuation Factor Calculations

Calculation of Site-Specific Dilution/Attenuation Factor (DAF)

The DAF value was calculated using equation 33 from NMED's *Risk Assessment Guidance for Site Investigations and Remediation (February, 2012).*

$$DAF = 1 + \left(\frac{K * i * D}{I * L} \right) \qquad DAF = 1 + \left(\frac{38.96 * 0.027 * 10.58}{0.000242 * 100} \right) = 461$$

Where:

$$D = \left(0.0112 * L^2\right)^{0.5} + D_a \left(1 - \exp\left[\frac{-L * I}{K * i * D_a} \right] \right)$$

$$D = \left(0.0112 * 100^2\right)^{0.5} + 12.5 \left(1 - \exp\left[\frac{-100 * 0.000242}{38.96 * 0.027 * 12.5} \right] \right) = 10.58 \text{ m}$$

K = Aquifer hydraulic conductivity (m/yr)
i = Hydraulic gradient (m/m)
D = Mixing zone depth (m)
I = Infiltration rate (m/yr)
L= Source length parallel to ground water flow (m)
D_a= Aquifer thickness (m)

Derivation of site-specific values:

K = 38.96 m/yr as determined from a slug test at well MW-1(completed in Sonsela Sandstone aquifer) and originally presented in Appendix C of the Discharge Plan Application for Giant Refining Company, Ciniza Refinery, dated November 21, 1985.

i = 0.027 m/m as measured during Fall 2010 ground water sampling event (potentiometric surface map of Sonsela aquifer attached)

D = 10.58 m [lower of aquifer thickness (12.5 m measured at nearest well that penetrates Sonsela aquifer – OW-12) or calculated mixing zone depth (10.58m)]

I = 0.000242 m/yr derivation using EPA's HELP model as described below

L = 100 m – conservative source area length measured across Aeration Basin and surrounding soils with potential impact

D_a= 12.5 m - saturated thickness measured at nearest well that penetrates Sonsela aquifer – OW-12during August 2008 ground water sampling event

Calculation of Infiltration Rate

Pursuant to *EPA's Soil Screening Guidance: User's Guide (Second Edition, July 1996)*, infiltration rates can be calculated either of two ways: (1) assume that infiltration rate is

equivalent to recharge, or (2) use the EPA HELP model to estimate infiltration. Because the Gallup site is located in an area with low annual rainfall rates and high potential evapotranspiration rates, method 1 is not representative of site conditions. That is to say that it is unreasonable to assume that infiltration is equal to recharge.

EPA's HELP model was used to calculate the site-specific infiltration rate. Site-specific meteorological data was obtained from the Western Regional Climate Center and New Mexico State University, which operates a nearby weather station (Thoreau 5 ENE) as part of the NWS Cooperator Climate Stations. The weather station is located east northeast of Thoreau, New Mexico on HWY 371 and is approximately 16 miles south southeast of the Gallup Refinery.

Data obtained from the Thoreau 5 ENE station includes mean monthly temperature and average monthly precipitation. The average wind speed (11.3 km/hr) was obtained from the Western Regional Climate Center, as measured at the Gallup, NM airport. Daily solar radiation and quarterly relative humidity values were based on measurements from Albuquerque, NM. This data was obtained from the National Oceanic and Atmospheric Administration (NOAA) and is included in the HELP model's Weather Generator module. A review of the monthly average weather conditions (temperature and precipitation) at Gallup and Albuquerque as shown in the table below indicates very similar conditions such that use of quarterly relative humidity and solar radiation from Albuquerque should be sufficient to estimate conditions at the Western Refining Gallup Refinery. The quarterly relative humidity values used are 48%, 30%, 45%, and 50% for the first, second, third, and fourth quarters, respectively.

The HELP model soil profile was constructed with two layers. The Sonsela Aquifer is considered to be the uppermost aquifer in the area (reference the May 2000 RCRA Post-Closure Care Part B Permit Application). The upper layer (Layer 1.1) represents the unconsolidated deposits that overlie the Chinle Formation bedrock. Based on the soil borings logs that surround the Aeration Basin and Old API Separator, the predominant lithology in this upper layer is silty clay and clay, with lesser amounts of sandy clay. There are relatively thin (several feet thick) discontinuous layers of clayey sand and sand. The soil type chosen in the model was loam with an average thickness of 10 meters. Loam would normally be expected contain a higher percentage of silt and sand than observed in the most of the soil borings and is considered to be a conservative estimate of actual field conditions.

The land surface was assumed to have a poor stand of grass, which is more conservative than the other possible option of bare soil. The slope of the land surface was calculated to be 7.7 % based on surveyed elevations a short distance to the east of west of the Aeration Basin. There are structures (e.g., parking lots, building pads, concrete foundations, etc.) that could limit infiltration but the model assumes only soil without any obstructions to infiltration. Based on the selected soil type (loam) the model default value for porosity is 0.463, field capacity is 0.232, wilting point is 0.116, and saturated hydraulic conductivity is 3.7E-4 cm/sec. These model default vales are taken from the US Department of Agriculture. Soil permeability tests conducted on soil samples collected beneath the nearby Land Treatment Unit indicated a permeability of 1.9E-5 cm/sec, thus the model default hydraulic conductivity of 3.7E-4 cm/sec is a conservative estimate (see attached page 2 of Appendix C from RCRA Post-Closure Care Permit Application).

The second layer (Layer 1.2) in the model represents the upper portion of the Chinle Formation, which overlies the Sonsela Aquifer. This upper portion of the Chinle Formation consists of mudstone/sandstone. The default soil type from the HELP model chosen to represent the upper Chinle Formation was silty loam. The model default value for porosity is 0.35, field capacity is 0.284, and wilting point is 0.135. However, a site-specific hydraulic conductivity was chosen to be more representative of actual site conditions. Yield tests, including slug tests and pumping tests have been performed at the refinery to estimate the hydraulic conductivity of the upper portion of the Chinle Formation (see attached documentation). A slug test performed on July 3, 1984 in well OW-4 indicated a hydraulic conductivity of 4.0E-7 cm/sec. A pump test was performed in well OW-24 on February 20, 1985 and it yielded a hydraulic conductivity of 2.5E-7 cm/sec. The higher of these two conductivity values (4.0E-7 cm/sec) was utilized as a site-specific hydraulic conductivity for the lower layer (i.e., Chinle Formation – mudstone/sandstone).

Using the model's synthetic weather generator and the aforementioned inputs, the model was run for a 40 year period to simulate potential infiltration (percolation or leakage through Layers 1.1 and 1.2). The model output is enclosed, showing the annual values. Over the modeled 40 year period, the average annual infiltration was 0.000242 meters/year. This average annual infiltration was used in the aforementioned calculation of the site-specific DAF value.

Project : Western Refining Gallup Refinery

Infiltration calculations

Model : HELP

An US EPA model for predicting landfill hydrologic processes and testing of effectiveness of landfill designs

Author : Your title Scott Crouch

Client : Title Ed Riege

Location : Albuquerque

1/15/2013

1. Profile. EPA profile1

Model Settings

[HELP] Case Settings

Parameter	Value	Units
Runoff Method	Model calculated	(-)
Initial Moisture Settings	Model calculated	(-)

[HELP] Surface Water Settings

Parameter	Value	Units
Runoff Area	100	(%%)
Vegetation Class	Poor stand of grass	(-)

Profile Structure

Layer	Top (m)	Bottom (m)	Thickness (m)
Loam	0.0000	-10.0000	10.0000
Chinle Formation - Mudstone/sandstone	-10.0000	-30.0000	20.0000

1.1. Layer. Loam

Top Slope Length: 300.0000
Bottom Slope Length: 300.0000
Top Slope: 7.7000
Bottom Slope : 7.7000

[HELP] Vertical Perc. Layer Parameters

Parameter	Value	Units
total porosity	0.463	(vol/vol)
field capacity	0.232	(vol/vol)
wilting point	0.116	(vol/vol)
sat.hydr.conductivity	3.7E-4	(cm/sec)
subsurface inflow	0	(mm/year)

1.2. Layer. Chinle Formation - Mudstone/sandstone

Top Slope Length: 300.0000
Bottom Slope Length: 30.0000
Top Slope: 7.7000
Bottom Slope : 7.7000

[HELP] Vertical Perc. Layer Parameters

Parameter	Value	Units
total porosity	0.35	(vol/vol)
field capacity	0.284	(vol/vol)
wilting point	0.135	(vol/vol)
sat.hydr.conductivity	4E-7	(cm/sec)
subsurface inflow	0	(mm/year)

Annual Totals rate (m)

	Precipitation (m)	Runoff (m)	Evapotranspiration (m)	Percolation or leakance through Layer 2 (m)
Year-1 (m)	1.9660E-01	0.0000E+00	1.9535E-01	1.3879E-05
Year-2 (m)	3.0150E-01	1.0001E-03	3.0471E-01	3.1513E-04
Year-3 (m)	2.3571E-01	0.0000E+00	2.4077E-01	2.0281E-03
Year-4 (m)	2.3012E-01	1.5981E-03	2.3584E-01	5.5298E-05
Year-5 (m)	2.5273E-01	0.0000E+00	2.4342E-01	3.3999E-05
Year-6 (m)	1.5875E-01	0.0000E+00	1.4979E-01	1.2773E-05
Year-7 (m)	1.8390E-01	0.0000E+00	1.8163E-01	0.0000E+00
Year-8 (m)	2.5781E-01	2.9505E-07	2.4741E-01	3.0084E-05
Year-9 (m)	1.9152E-01	3.7197E-04	2.1155E-01	1.8727E-05
Year-10 (m)	2.2708E-01	1.0422E-03	2.1507E-01	6.2184E-05
Year-11 (m)	2.3673E-01	1.2339E-03	2.5338E-01	6.6487E-03
Year-12 (m)	2.5883E-01	9.3579E-07	2.3932E-01	0.0000E+00
Year-13 (m)	1.8466E-01	9.3962E-09	2.0131E-01	2.6008E-05
Year-14 (m)	1.5875E-01	0.0000E+00	1.5152E-01	0.0000E+00
Year-15 (m)	2.4892E-01	0.0000E+00	2.5657E-01	1.2845E-05
Year-16 (m)	1.6688E-01	0.0000E+00	1.5475E-01	0.0000E+00
Year-17 (m)	1.2929E-01	0.0000E+00	1.1804E-01	0.0000E+00
Year-18 (m)	1.4961E-01	0.0000E+00	1.6469E-01	4.1083E-05
Year-19 (m)	2.0447E-01	0.0000E+00	1.9000E-01	0.0000E+00
Year-20 (m)	1.8110E-01	1.6632E-04	1.9096E-01	1.2713E-05
Year-21 (m)	2.3622E-01	0.0000E+00	2.3463E-01	1.3324E-05
Year-22 (m)	1.3665E-01	0.0000E+00	1.4617E-01	0.0000E+00
Year-23 (m)	2.3317E-01	3.4029E-03	2.2879E-01	0.0000E+00
Year-24 (m)	2.2098E-01	0.0000E+00	2.2620E-01	2.3928E-05
Year-25 (m)	1.4478E-01	0.0000E+00	1.3168E-01	0.0000E+00
Year-26 (m)	2.0041E-01	1.0938E-03	1.8008E-01	1.8989E-05
Year-27 (m)	2.3216E-01	0.0000E+00	2.3529E-01	2.4520E-05
Year-28 (m)	1.9228E-01	0.0000E+00	2.0836E-01	0.0000E+00
Year-29 (m)	2.3343E-01	0.0000E+00	2.3747E-01	2.3204E-05
Year-30 (m)	1.8898E-01	0.0000E+00	1.9221E-01	0.0000E+00
Year-31 (m)	2.4536E-01	7.1872E-05	2.3620E-01	0.0000E+00
Year-32 (m)	2.2682E-01	0.0000E+00	2.2482E-01	4.1874E-05
Year-33 (m)	3.1648E-01	4.4010E-03	3.1326E-01	4.8895E-05
Year-34 (m)	2.1107E-01	0.0000E+00	1.9883E-01	0.0000E+00
Year-35 (m)	2.7432E-01	4.5785E-04	2.8167E-01	1.3746E-05
Year-36 (m)	1.5113E-01	0.0000E+00	1.3259E-01	0.0000E+00
Year-37 (m)	2.1692E-01	8.4320E-05	2.5279E-01	2.7002E-05
Year-38 (m)	1.7450E-01	0.0000E+00	1.6655E-01	0.0000E+00
Year-39 (m)	2.1057E-01	9.4687E-04	1.8508E-01	9.8535E-05
Year-40 (m)	1.7501E-01	0.0000E+00	1.9865E-01	3.7743E-05
Total (m)	8.3762E+00	1.5873E-02	8.3574E+00	9.6833E-03

$$\frac{9.6833E\text{-}03\ m}{40\ yr} = 0.000242\ m/yr$$

ALBUQUERQUE WSFO AIRPOR, NEW MEXICO (290234)

Period of Record Monthly Climate Summary

Period of Record : 1/ 1/1914 to 12/31/2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	47.2	53.2	60.6	70.0	79.4	89.3	91.7	88.9	82.4	71.0	56.9	47.7	69.9
Average Min. Temperature (F)	23.4	27.8	33.0	40.8	50.1	59.2	64.6	62.9	56.0	44.0	31.4	24.4	43.1
Average Total Precipitation (in.)	0.37	0.40	0.52	0.54	0.63	0.61	1.38	1.46	0.96	0.88	0.46	0.46	8.67
Average Total SnowFall (in.)	2.3	1.8	1.6	0.6	0.0	0.0	0.0	0.0	0.0	0.1	1.0	2.2	9.6
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record.
Max. Temp.: 91.2% Min. Temp.: 91.2% Precipitation: 96.6% Snowfall: 80.1% Snow Depth: 80.1%
Check Station Metadata or Metadata graphics for more detail about data completeness.

THOREAU 5 ENE, NEW MEXICO (298830)

Period of Record Monthly Climate Summary

Period of Record : 1/ 1/1930 to 11/30/1992

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	43.2	47.9	54.5	63.8	72.6	83.1	85.5	82.3	76.6	66.8	53.4	44.9	64.5
Average Min. Temperature (F)	18.6	21.9	26.5	32.3	40.7	49.8	55.8	53.8	47.4	37.2	26.5	19.8	35.9
Average Total Precipitation (in.)	0.64	0.61	0.68	0.45	0.58	0.56	1.72	2.16	1.19	0.88	0.59	0.65	10.71
Average Total SnowFall (in.)	8.3	5.6	5.3	1.1	0.4	0.0	0.0	0.0	0.0	1.4	3.1	8.1	33.3
Average Snow Depth (in.)	1	0	0	0	0	0	0	0	0	0	0	1	0

Percent of possible observations for period of record.
Max. Temp.: 46.1% Min. Temp.: 46.1% Precipitation: 68.4% Snowfall: 61.8% Snow Depth: 61.8%
Check Station Metadata or Metadata graphics for more detail about data completeness.

THOREAU 5 ENE, NEW MEXICO

Station Metadata

From NCDC Station Historical Listing for NWS Cooperative Network
ObsTyp: t-Temperature-1, p-Daily precip-2, w-(blank), s-(blank), e-Evap-5
h-Hourly precip - 6 0.01" Universal, or - 7 0.10" Fisher-Porter
U - Observed, but beginning date is uncertain

Count	Number (Coop)	Station Name (From NCDC listing)	Lat ddmm	Long dddmm	Elev ftx10	Start yy mm	ObsTyp t	p	w	s	e	h	End yy mm
1050	298830-4	THOREAU 6 ENE	3526	10808	0713	53 09	U	U					63 01
1051	298830-4	THOREAU 6 ENE	3526	10809	0711	63 01	U	U					88 04
1052	298830-4	THOREAU 5 ENE	3526	10809	0710	88 04	1	2				7	99 99

Statistics by element

(From WRCC data archives)
Last Compiled on Apr.23, 2009.
Dates are format of YYYYMMDD. Numbers are total Number of observations

STATION	START	END	PRECP	SNWFL	SNWDP	TMAX	TMIN	TOBS	EVAP	WNDM
298830	19300101	19921130	15723	14204	14192	10584	10584	10580	0	0

STATION - NCDC COOP Station number
START - First Date in record
END - Last Date in record (when last compiled)
PRECP - Precipitation
SNWFL - Snowfall
SNWDP - Snow depth
TMAX - Daily Max. Temperature
TMIN - Daily Min. Temperature
TOBS - Temperature at Observation time
EVAP - Evaporation
WNDMV - Wind Movement

Statistics by observation

(From WRCC data archives)
Last Compiled on Apr.23, 2009.
Dates are format of YYYYMMDD. Numbers represent one day and one day is considered present if

Average Wind Speeds - MPH

Average wind speeds are based on the hourly data from 1996-2006 from automated stations at reporting airports (ASOS) unless otherwise noted.

For more information click here on Western States, Alaska or Hawaii and Pacific Islands

Arizona California Colorado Hawaii Idaho Montana Nevada New Mexico Oregon Utah Washington Wyoming

MONTANA

AVERAGE WIND SPEED - MPH

STATION	ID	Years	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
BAKER AIRPORT ASOS	KBHK	1998-2006	10.4	10.5	12.2	12.5	12.7	11.7	10.7	10.8	10.0	10.3	10.5	10.7	11.1
BILLINGS-LOGAN AP ASOS	KBIL	1996-2006	12.8	12.2	11.0	10.5	10.4	10.0	9.3	9.2	9.6	10.3	12.0	13.0	10.9
BOZEMAN AIRPORT ASOS	KBZN	1996-2006	4.6	5.3	6.4	7.2	7.0	6.3	6.3	6.4	6.1	5.7	4.9	4.8	5.9
BUTTE AIRPORT ASOS	KBTM	1996-2006	4.7	5.0	6.8	7.3	7.7	7.3	6.9	6.6	6.2	6.2	5.2	4.9	6.2
CUT BANK AIRPORT ASOS	KCTB	1996-2006	14.6	12.8	13.3	12.8	13.4	12.3	11.2	10.2	11.4	13.0	13.6	14.6	12.8
DILLON AIRPORT ASOS	KDLN	1997-2006	10.2	9.7	10.3	10.0	9.6	8.4	8.0	8.0	8.7	9.0	9.3	9.2	9.2
GLASGOW AIRPORT ASOS	KGGW	1996-2006	9.3	9.3	11.7	12.4	12.6	11.4	10.7	11.0	10.5	10.3	9.3	9.4	10.6
GLENDIVE AIRPORT AWOS	KGDV	1996-2006	9.5	9.7	10.5	11.3	11.6	10.4	9.4	9.6	9.6	10.1	9.7	10.2	10.1
GREAT FALLS AP ASOS	KGTF	1996-2006	13.3	12.3	11.8	11.2	11.3	10.2	9.6	9.2	10.4	11.9	13.2	13.8	11.5
GREAT FALLS-MALSTROM AF	KGFA	1996-2006	12.3	9.9	11.9	10.7	10.3	9.7	9.1	8.8	9.9	10.4	13.2	13.2	10.9
HAVRE AIRPORT ASOS	KHVR	1996-2006	9.9	9.6	10.7	11.0	11.6	10.6	9.8	9.5	9.8	9.8	10.6	11.0	10.3
HELENA AIRPORT ASOS	KHLN	1996-2006	5.8	6.3	7.8	8.3	8.4	8.2	7.4	6.6	6.7	6.6	5.8	6.0	7.0
JORDAN AIRPORT ASOS	KJDN	1996-2006	7.3	7.9	9.3	10.0	10.5	9.7	8.4	8.4	8.2	8.2	7.9	8.1	8.6
KALISPELL AIRPORT ASOS	KGPI	1996-2006	4.1	3.8	6.0	6.7	6.6	5.7	5.2	5.0	4.6	4.2	4.0	3.2	4.9
LEWISTOWN AIRPORT ASOS	KLWT	1996-2006	10.6	9.5	10.2	9.8	9.9	9.0	7.9	8.0	8.5	9.2	10.2	10.7	9.5
LIVINGSTON AIRPORT ASOS	KLVM	1996-2006	19.8	17.4	16.2	14.0	13.1	11.9	11.0	11.2	12.7	14.6	18.4	20.4	15.2
MILES CITY AP ASOS	KMLS	1996-2006	8.8	9.4	10.6	11.2	11.3	10.5	9.9	9.7	9.7	9.7	9.3	9.3	9.9
MISSOULA AIRPORT ASOS	KMSO	1996-2006	3.2	3.7	5.4	6.1	6.0	6.1	5.7	5.2	4.3	3.9	3.5	3.7	4.7
SIDNEY AIRPORT AWOS	KSDY	1996-2006	8.9	9.0	9.5	10.2	10.4	9.0	7.7	7.9	8.2	8.8	8.7	9.4	9.0
WOLF POINT AIRPORT ASOS	KOLF	1998-2006	7.1	7.6	9.4	10.3	10.4	8.9	8.2	8.3	7.6	7.7	7.3	7.6	8.3

$7.0 \text{ miles/hr} \times \frac{1 \text{ kilo.}}{.62 \text{ miles}} = 11.3 \text{ K/hr}$

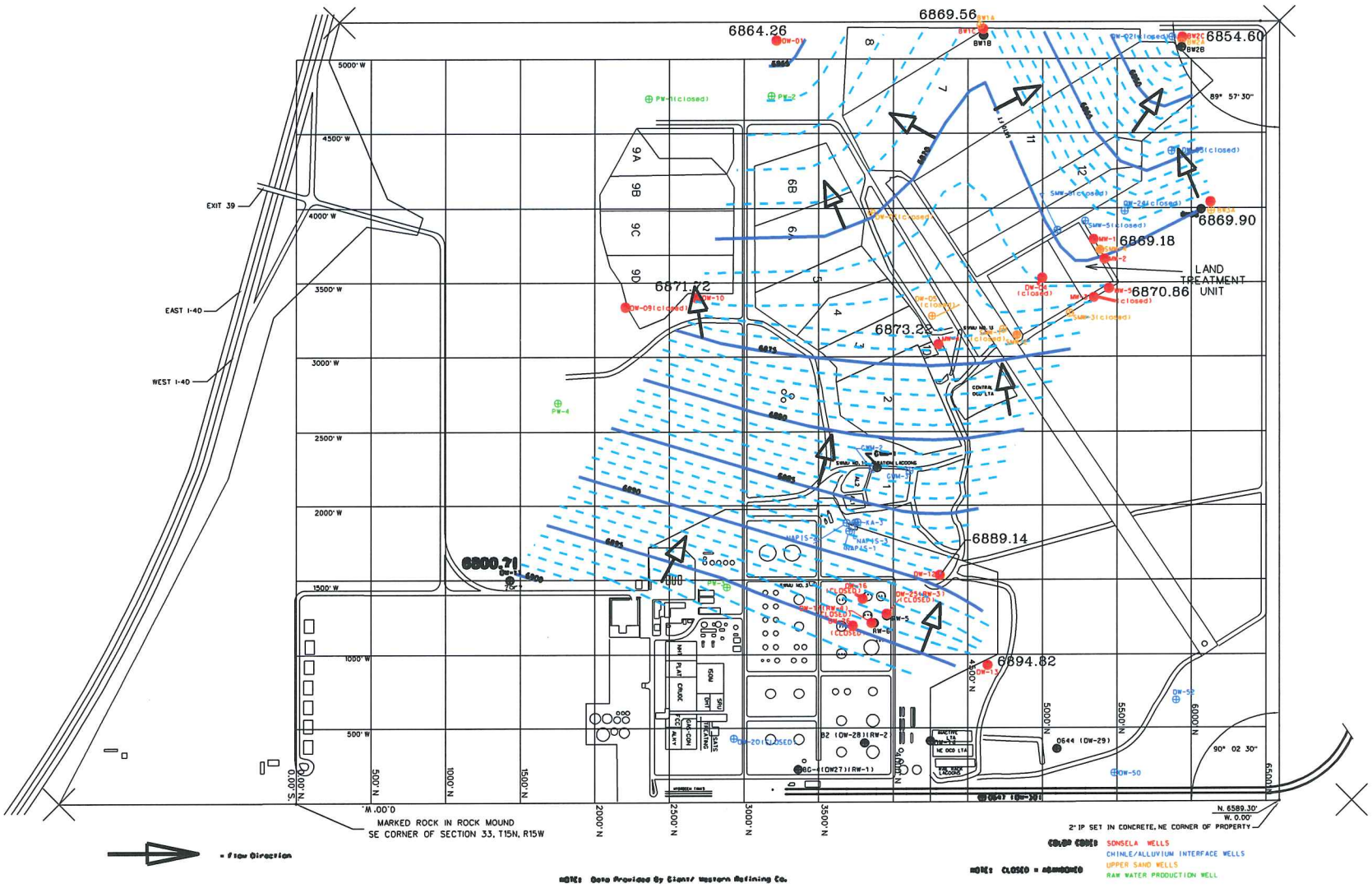
NEW MEXICO

AVERAGE WIND SPEED - MPH

STATION	ID	Years	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
ALAMOGORDO AIRPORT ASOS	KALM	1996-2006	5.1	6.3	7.1	7.9	7.1	6.9	6.1	5.3	5.2	5.2	5.0	5.0	6.0
ALAMOGORDO-HOLLOMAN AFB	KHMN	1996-2006	8.5	9.7	10.6	11.8	10.8	10.6	9.8	9.1	8.8	8.5	8.1	8.3	9.6
ALBUQUERQUE AP ASOS	KABQ	1996-2006	7.0	8.2	9.3	11.1	10.0	10.0	8.7	8.3	8.0	7.9	7.2	6.9	8.5
ALBUQUERQUE-DBLE EAGLE	KAEG	1999-2006	7.1	7.9	9.0	10.6	9.5	8.6	7.0	6.2	7.0	6.5	6.5	6.1	7.7
ARTESIA AIRPORT ASOS	KATS	1997-2006	7.8	9.1	10.1	10.9	10.2	9.9	7.8	6.9	7.6	7.8	7.6	7.4	8.5
CARLSBAD AIRPORT ASOS	KCNM	1996-2006	9.2	9.8	10.9	11.4	10.4	9.9	8.5	7.7	8.2	8.5	8.4	8.8	9.3
CLAYTON MUNI AP ASOS	KCAO	1996-2006	11.9	12.7	13.4	14.6	13.4	13.0	11.7	10.8	11.8	12.1	12.1	12.0	12.4
CLINES CORNERS	KCQC	1998-2006	16.2	16.1	15.7	16.9	14.6	13.5	10.6	10.1	11.8	13.3	15.0	16.0	14.1
CLOVIS AIRPORT AWOS	KCVN	1996-2006	12.3	12.3	13.4	13.8	12.4	11.9	9.7	8.9	9.7	10.9	11.6	12.2	11.6
CLOVIS-CANNON AFB	KCVS	1996-2006	12.5	12.6	13.6	13.8	12.2	12.5	10.7	10.0	10.2	11.3	11.7	12.4	12.0
DEMING AIRPORT ASOS	KDMN	1996-2006	8.7	9.7	10.9	12.0	10.6	10.1	8.9	8.1	8.4	8.2	8.5	8.1	9.3
FARMINGTON AIRPORT ASOS	KFMN	1996-2006	7.3	8.3	9.0	9.8	9.4	9.4	8.7	8.2	8.0	7.8	7.6	7.3	8.4
GALLUP AIRPORT ASOS	KGUP	1996-2006	5.7	6.9	7.8	10.0	9.0	8.8	6.9	6.0	6.5	6.1	5.6	5.3	7.0
GRANTS-MILAN AP ASOS	KGNT	1997-2006	7.8	8.8	9.6	10.9	10.0	9.8	8.1	7.2	7.9	8.4	8.0	7.6	8.7
HOBBS AIRPORT AWOS	KHOB	1996-2006	11.3	11.9	12.6	13.4	12.5	12.3	11.0	10.0	10.2	10.6	10.7	11.1	11.4
LAS CRUCES AIRPORT AWOS	KLRU	2000-2006	6.4	7.5	8.8	10.1	8.7	8.2	6.8	6.0	6.2	6.1	6.4	6.0	7.3
LAS VEGAS AIRPORT ASOS	KLVS	1996-2006	10.9	12.2	12.5	14.3	12.4	11.8	10.0	9.2	10.9	10.8	11.0	10.9	11.4
LOS ALAMOS AP AWOS	KLAM	2005-2006	3.9	5.7	7.5	8.1	7.1	7.3	5.3	4.8	5.7	5.1	4.4	3.2	5.4
RATON AIRPORT ASOS	KRTN	1998-2006	8.9	9.4	10.4	12.2	10.8	10.2	8.4	8.1	8.6	9.0	8.6	8.5	9.4
ROSWELL AIRPORT ASOS	KROW	1996-2006	7.4	8.9	9.9	11.1	10.3	10.2	8.8	7.9	8.3	8.0	7.5	7.3	8.8
RUIDOSO AIRPORT AWOS	KSRR	1996-2006	8.8	9.6	10.0	11.6	10.0	8.4	5.9	5.3	6.4	7.4	7.9	8.7	8.3
SANTA FE AIRPORT ASOS	KSAF	1996-2006	8.9	9.5	9.9	11.2	10.6	10.5	9.2	8.8	8.8	9.1	8.7	8.5	9.5
SILVER CITY AP AWOS	KSVC	1999-2006	8.1	8.7	9.9	10.8	10.2	9.9	8.5	7.2	6.9	7.6	7.9	7.7	8.5
TAOS AIRPORT AWOS	KSKX	1996-2006	5.8	6.5	7.7	9.1	8.6	8.5	7.1	6.6	6.7	6.6	6.0	5.7	7.0
TRUTH OR CONSEQ AP ASOS	KTCS	1996-2006	7.4	8.7	9.9	11.1	10.4	9.8	8.1	7.4	7.7	8.0	7.7	7.3	8.6
TUCUMCARI AIRPORT ASOS	KTCC	1999-2006	10.0	11.2	11.9	13.6	11.9	11.6	9.9	9.3	10.0	10.0	10.4	10.2	10.8

SONSELA POTENTIOMETRIC SURFACE MAP
WESTERN REFINING COMPANY
GALLUP REFINERY

Fall 2012



Peregrine GeoConnect, Inc.

1" = 500'

File 11-002

Figure 9
Sonsela Water
Piezometric Surface (July-Sept 2010)

Western Refining - Gallup Refinery
Interstate 40, Exit 39
Jamestown, New Mexico 87347

Date: March 28, 2010

APPENDIX C – DISCHARGE PLAN APPLICATION
GIANT REFINING COMPANY
CINIZA REFINERY

November 21, 1985

APPENDIX C
AQUIFER-TEST DATA AND ANALYSES

TEST PUMPING OF CHINLE SHALE

METHODOLOGY AND DESCRIPTION OF THE TEST

The test consisted of a 5 hour pumping period and a 2 hour recovery period. An air-driven piston pump capable of sustaining pumping rates as low as 10 gallons/hour (0.167 gpm) was used for the test. Water level measurments were taken with an electronic sounder. The well (OW-24) is located approximately 250 feet northwest of the land treatment facility and is completed within the Chinle shale. The lithologic and completion log of the well is attached (Figure F-2).

Pumping began at 1515 hours on February 20, 1985 at a rate of 10 gallons/hour. The produced water was very turbid. Clogging of the pump and pump lines necessitated continuous monitoring and adjustment of the discharge.

After 4 hours of pumping at 10 gallons/hour, the drawdown of the well appeared to stabilize at about 7 feet. The discharge rate was increased to 20 gallons/hour in order to more effectively stress the aquitard. After one hour of additional pumping a total drawdown of 12 feet was observed. However, this higher pumping rate increased the turbidity of the discharge and caused instability of the pumping rate. The lack of control of the discharge rate and the potential of diamage to the pump forced the termination of the test after a total of 5 hours of pumping.

Water level recovery was observed for 100 minutes. At this time the water level had recovered to within 90% of the pre-pumping level.

TABLE F-1

Pump Test Data, OW-24

PUMP TEST ANALYSIS

Field measurements are summarized in Table F-1. Due to the short pumping time and potential well-bore and gravel-pack effects, the final analysis was based on methods developed by Shafer, for low-conductivity materials.

Partial penetration effects were neglected in the analysis because the low pumping rates and the expected anisotropy of the aquitard would prevent significant vertical flow to the well bore. The low pumping rate was also designed to completely drain the gravel pack in the well to insure accurate recovery data.

A copy of Shafer's methodology is attached, and the data for his analysis is given in Table F-2. Figure F-1 is a plot of the recovery data, according to Shafer's methods. This Figure includes calculation of T and K for the Chinle shales.

TD = 58'-4" = 58.33'
DW = 31.96
Pump @ 55 — 26.37' of water
≈ 18 gal

PUMPING DATA

DATA SHEET FOR RECORDING PUMP TEST DATA

County: McKinley Co.
Location: Ciniza Refinery 2/22/85

Observation well no. _____
Pumped well no. OW-24

Average Q _____ gpm r = _____ ft. r^2 = _____

Date	Hour	t (min)	t' (min)	t/t'	Depth to water	s (unadjusted)	Adjustment Δs	s' (adjusted)	Q (gpm)	Remarks
2-20	1515	0			31'-11.5"	0 in	Feet		10 gph	STATIC LEVEL w/ PUMP
	1516	1			33-0	12.5	1.04			LARGE INITIAL DROP FILL HOSE FILL UP
	1517	2			33-1	13.5	1.13			Setting pump rate
	1518	3			33-4	16.5	1.38			
	1519	4			33-8¾	20.75	1.73			
	1520	5			33-11½	24.0	2.0'			
	1521	6			34-2	26.5	2.22			
	1522	7			34-2½	27.0	2.25			
1 min	1523	8			34-3	27.5	2.27			
	1524	9			34-4	28.5	2.37			
	1525	10			34-5	29.5	2.46			
	1527	12			34-6¾	30.75	2.56			
	1529	14			34-9	33.5	2.79			
	1531	16			35-0	36.5"	3.04			
2 min	1533	18			35-2¾	38.75	3.23			
	1535	20			35-4½	41.0	3.42			
	1540	25			35-10½	47.0	3.92			
	1545	30			36-3	51.5	4.28			
	1550	35			36-2½	51.0	4.25			
	1555	40			36-8	56.5	4.71		10 gph	CLEANED PUMP valve
5 min	1600	45			37-2¼	62.75	5.23			
	1605	50			36-10½	61.0	5.08			clear pump valve
	1610	55			NR					
	1615	60			37-10¼	~~88.75~~ 70.75	5.90			Pumped 10 gal
10 min	1625	70			38'-½	85.0 73.0	6.08			

PUMPING DATA

DATA SHEET FOR RECORDING PUMP TEST DATA

County: _____ Observation well no. MW-24

Location: Cimarex Refinery Pumped well no. MW-24

Average Q 10 gpm r = — ft. r^2 = —

	Date	Hour	t (min)	t' (min)	t/t'	Depth to water	s (unadjusted)	Adjustment Δs	s' (adjusted)	Q gpm	Remarks
	5-20	1635	80			39-3½	~~80.0~~ 78	6.33		10	
		1645	90			38-7-	~~91.5~~ 79.5	6.79			Lift pump to 60'
		1655	100			37-6½	69.0	5.75			clear pump, ready pressure
		1705	110			38-11½	~~94.0~~ 84.0	7.00			
2 hours		1715	120			39-2½		7.27			Pumped 20 gal
		1730	135			38-11		6.97			
15 min		1745	150			39-2½		7.25			
		1800	165			39-0½		7.08			
3 h		1815	180			39-2		7.21			Pumped 30 gal
		1830	195			39-5		7.46			
		1845	210			39-5		7.46			
		1900	225			39-2		7.21			
4 h		1915	240			38-11½		7.00			Pumped 40 gal
		1930	255			39-0		7.04		10	
		1932	257			39-4		7.38		20	INCREASE PUMP RATE TO 30 GPM
		1934	259			39-10		7.87			PUMP SLIPPED APPROX 1 FOOT - REPLACED TO APPROX SAME LEVEL
2 min		1936	261			40-3½		8.33			
		1938	263			40-3½		8.33			
		1940	265			40-1½		8.17			PUMPING RATE FELL-OFF SLIGHTLY
		1945	270			40-9		8.79			
		1950	275			41-9½		9.83			
5 min		1955	280			42-0		10.04			
		~~2000~~	285			41-8		9.72			
		2005	290			42-6½		9.75			
		2010	295			43-4		11.27			Silt in Pump
15 min	5 h	2015	300			43-2½		11.25			Adj pump valve
		2030	315			45-10½		11.92			pumped 10 gal

RECOVERY DATA

DATA SHEET FOR RECORDING PUMP TEST DATA

County: _____ Observation well no. _____

Location: Cimiy Refining Purged well no. [illegible]-24

Average Q _____ gpm r = _____ ft. r^2 = _____

	Date	Hour	t (min)	t' (min)	t/t'	Depth to water	s (unadjusted)	Adjustment Δs	s' (adjusted)	Q (gpm)	Remarks
	1/22	2032		0		43-11½	144"	12.0'	0	20 gph	
		2034		2		42-7-		10.63'	1.37		
		2036		4		41-8¾		9.69	2.31		
2 min		2038		6		40-10¼		8.86	3.14		
		2040		8		40-2		8.21	3.79		
		2042		10		39-6¼		7.56	4.44		
		2047		15		38-0¾		6.11	5.89		
		2052		20		37-1½		5.17	6.83		
		2057		25		36-4-		4.38	7.62		
		2102		30		35-8½		3.75	8.25		
		2107		35		35-2¼		3.27	8.73		
		2112		40		34-9¾		2.86	9.14		
5 min		2117		45		34-5¾		2.52	9.48		
		2122		50		34-3¾		2.27	9.73		
		2127		55		34-0½		2.07	9.93		
		2132		60		33-10½		1.92	10.08		
		2142		70		33-7½		1.66	10.34		
10 min		2152		80		33-5¾		1.51	10.49		
		2202		90		33-4½		1.42	10.58		
		2212		100		33-3¼		1.32	10.68		
		2222		110							
		2232		120							
15 min		2247		135							
		2302		150							
		2317		165							

TABLE F-2

DATA FOR SHAFER'S METHOD

Time Since Pumping Started (min)	Drawdown (feet) (s)	Feet of Casing Filled (ft)	Time To Fill (min)	Q (gpm)	S/Q (ft/gpm)
317	12.0	0	0	---	----
319	10.63	1.37	2	.45	23.8
321	9.69	.94	2	.31	31.6
323	8.86	.83	2	.27	32.7
325	8.21	.65	2	.21	38.7
327	7.56	.65	2	.21	35.6
332	6.11	1.45	5	.19	32.3
337	5.17	.94	5	.13	42.1
342	4.38	.79	5	.10	42.5
347	3.75	.63	5	.08	45.6
352	3.27	.48	5	.06	52.2
357	2.86	.41	5	.05	53.4
362	2.52	.34	5	.04	56.8
367	2.27	.25	5	.03	69.5
372	2.07	.20	5	.026	79.3
377	1.92	.15	5	.019	98.0
387	1.66	.26	10	.017	97.8
397	1.51	.15	10	.009	154
407	1.42	.15	10	.009	145
417	1.32	.10	10	.006	202

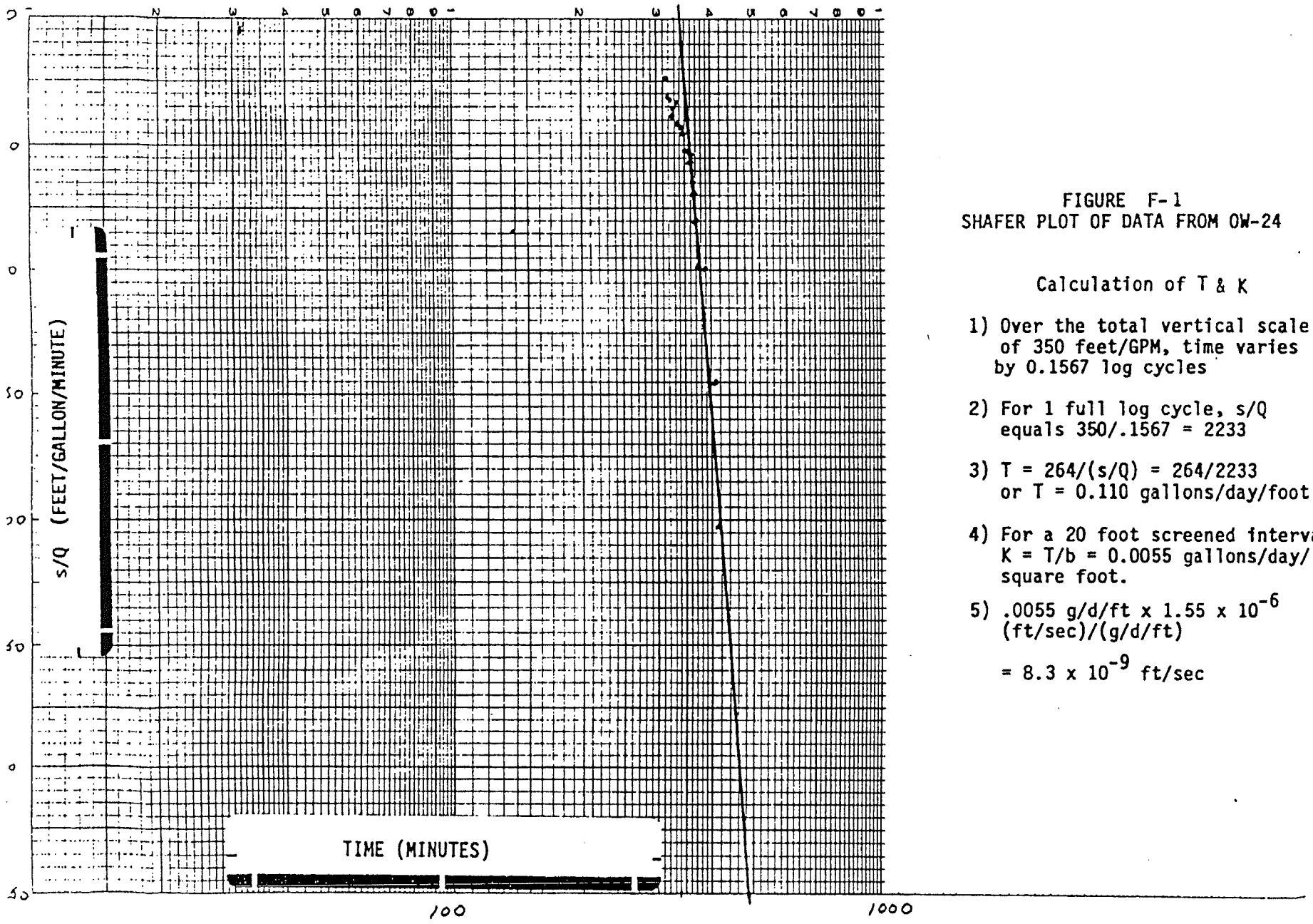


FIGURE F-1
SHAFER PLOT OF DATA FROM OW-24

Calculation of T & K

1) Over the total vertical scale of 350 feet/GPM, time varies by 0.1567 log cycles

2) For 1 full log cycle, s/Q equals 350/.1567 = 2233

3) T = 264/(s/Q) = 264/2233 or T = 0.110 gallons/day/foot

4) For a 20 foot screened interval K = T/b = 0.0055 gallons/day/square foot.

5) .0055 g/d/ft x 1.55×10^{-6} (ft/sec)/(g/d/ft)

= 8.3×10^{-9} ft/sec

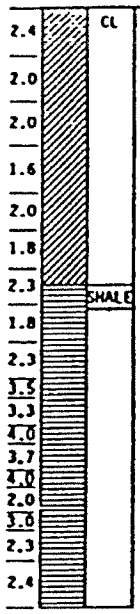
BO..G OW-24

SURFACE ELEVATION: 6878 FEET

DEPTH IN FEET	LABORATORY TEST DATA: TESTS REPORTED ELSEWHERE	ATTERBERG LIMITS: LIQUID LIMIT (%)	ATTERBERG LIMITS: PLASTICITY INDEX (%)	STRENGTH TEST DATA: TYPE OF TEST	STRENGTH TEST DATA: NORMAL OR CONFINING PRESSURE (PSF)	STRENGTH TEST DATA: SHEAR STRENGTH (PSF)	STRENGTH TEST DATA: DEVIATOR STRESS (PSF)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)
0									
10									
20									
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									
160									

PENETRATION RATE MINUTES/FOOT

SYMBOLS



DESCRIPTION

TRIASSIC PERIOD

CHINLE FORMATION
REDDISH BROWN, VERY FINE SANDY CLAY, SOFT, HIGHLY WEATHERED

30 FEET: SHALE, REDDISH BROWN, SANDY, SOFT, FRESH

BORING COMPLETED AT 65.0 FEET ON 1/2/81.
4-INCH PVC PIEZOMETER INSTALLED WITH PERFORATIONS FROM 41.0 TO 61.0 FEET.
GRAVEL PLACED FROM 28.0 TO 61.0 FEET AND BORING SEALED WITH BENTONITE AND CEMENT TO SURFACE.
GROUND WATER LEVEL MEASURED AT 32.5 FEET BELOW GROUND ON 1/5/81.

FIGURE F-2
LOG OF WELL OW-24

LOG OF BORINGS

DAMES & MOORE

Pumping Test Analyses for Low Yield Formations

by David C. Shafer

William F. Achuff
Director

Occasionally it is necessary to determine aquifer characteristics of very low yielding formations—those with transmissivities less than 500 gallons per day per foot. Though interest in these aquifers is certainly not because of their productive capability, it may be desirable to determine groundwater flow characteristics even in these low yield formations in order to determine such things as regional groundwater flow patterns, effect of dewatering or migration of pollution plumes near point sources of contamination.

Different Approach

Conventional pumping test analysis using the standard time drawdown graph often does not work effectively in low T (transmissivity) formations for two reasons. First, the pumped well's low specific capacity (gallons per minute per foot of drawdown) may cause the pump to break suction during the test and it may be impractical to throttle back the pumping rate sufficiently to prevent this. Second, even if a constant pumping rate can be maintained without breaking suction, most of the data obtained will probably reflect casing storage effects rather than true aquifer parameters (see "Casing Storage Can Affect Pumping Test Data," Jan-Feb. 1978, Johnson Drillers Journal). Thus a different approach is required.

The best method for analyzing these formations is to pump a substantial portion of the casing empty, then shut the pump off and measure water levels as they recover. In ordinary pumping tests these measurements correspond to the non-pumping portion of the test. However, in the low T formations this "recovery period" is actually the "pumping period!"

After pump shut-off, the casing slowly begins filling with water. This water comes from the aquifer and actually represents the water pumped during this so called "pumping period." The pumping rate is determined by measuring the volume of

Pumping rate = 10 gpm
Pumping period = 15 minutes
Drawdown at pump shut off = 90 ft
Casing — 6" I.D.
Drop pipe — 1¼" I.D.

Time in minutes since pumping started (t)	Drawdown in feet (s)	Number of feet of casing filled	Time in minutes required to fill	Volume filled divided by time required in gallons per minute (Q)	s/Q in feet per gallon per minute
15 (pump shut off)	90				
17	85.66	4.34	2	3.04	28.2
20	79.7	5.96	3	2.78	28.6
30	64.2	15.5	10	2.17	29.5
40	51.9	12.3	10	1.72	30.2
60	35.6	13.3	20	1.14	31.1
80	24.6	11.0	20	.77	31.8

Table 1

casing filled in a given length of time.

During the test, careful measurements are made of time since pumping began (t) along with drawdown (s) at each of these times. Then a calculation is made to determine Q for each time t and finally the ratio s/Q is computed for each measured drawdown value. The ratio is simply the reciprocal of the specific capacity.

A graph is then constructed showing t versus the ratio s/Q plotted as usual on semi-logarithmic graph paper with t on the log scale. A straight line of best fit is drawn through the data points and T is calculated as follows:

$$T = \frac{264}{\Delta(s/Q)}$$

where $\Delta(s/Q)$ is the change in s/Q over one log cycle of graph paper.

This graph has the unique advantage that it will accurately reflect aquifer transmissivity independent of casing storage effects. In addition it will be sensitive to nearby recharge and/or negative boundaries and will reveal these conditions like any ordinary time drawdown graph.

To see how this technique works it is best to work an example. Table 1 shows data obtained from a 6-inch well pumped at 10 gpm for 15 minutes. Drawdown after 15 minutes of pumping measured 90 feet.

The next data point was recorded two minutes following pump shut-off or 17 minutes since pumping started. At this time the pumping water level was 85.66 feet, indicating that 4.34 feet of casing had filled during the two minute interval.

The annulus between the 6-inch casing and 1¼" drop pipe holds 1.4 gallons per foot so that the volume of casing filled is 1.4 times 4.34, or 6.08 gallons in two minutes. Thus,

$$Q = 6.08 \text{ gallons}/2 \text{ minutes} = 3.04 \text{ gpm}$$

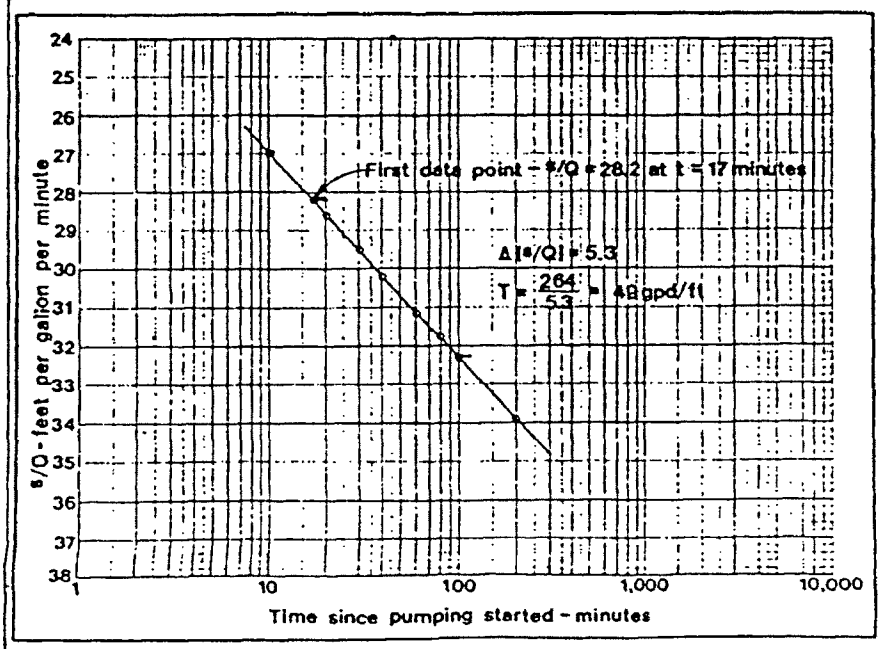
finally,

$$s/Q = 85.66 \text{ ft}/3.04 \text{ gpm} = 28.2 \text{ ft/gpm}$$

which is plotted at a time of 17 minutes on the graph shown here.

This analysis is repeated for each drawdown measurement. The resultant calculated s/Q values are shown in the table and plotted in the figure. The formation T value from the graph is

$$T = \frac{264}{\Delta(s/Q)} = 264/5.3 = 49 \text{ gpd/ft}$$



In low transmissivity situations, readings are taken after pump shut-off. In this method, s/Q is the reciprocal of the specific capacity and t is time, measured after shut-off as water begins to enter the casing.

Conventional Analysis

Examination of the hydraulic characteristics of this well (not included here) shows that if a conventional time drawdown graph had been used, casing storage effects would have lasted for approximately twelve hours. This means that data recorded in the first twelve hours of pumping would have been useless and longer pumping than this would have been required to obtain any usable data at all. However, data collected after twelve hours of pumping probably would be more influenced by boundary conditions than by aquifer transmissivity. Thus, in practice, it actually might have been impossible to determine the T values using conventional analysis techniques regardless of the length of the test. The value of the method described above becomes very clear; it may be the only way to determine T values in certain low yielding aquifers.

In order to maximize the accuracy of this method, it is best to unload (empty) the casing as rapidly as possible. Thus it is actually better to use a high capacity pump than a low capacity pump in analyzing extremely low-yielding wells!

Another good idea is to unload the casing with compressed air since this can typically be done in one minute or less.

Recorded Data Must Be Accurate

An additional important consideration is that all data recorded for this type of analysis must be absolutely accurate. Small errors in the recorded values of time and/or drawdown can result in large errors in the calculated values of s/Q. For best results, drawdown should be recorded to the nearest hundredth of a foot and timed to the nearest second or two.

JOHN W. SHOMAKER
CONSULTING GEOLOGIST
3236 CANDELARIA, N.E.
ALBUQUERQUE, NEW MEXICO 87107

(505) 884-2897

RECEIVED SEP 24 1984

September 20, 1984

Carl D. Shook, Plant Manager
Giant Refining Company, Ciniza Refinery
Route 3, Box 7
Gallup, New Mexico 87301

Re: results of permeability tests, July 2 and 3, 1984

Dear Carl:

Copies of the field notes, calculations, and data plots for the two permeability tests are attached. The tests are summarized as follows:

Well OW-4 The well is completed principally in the clay and shale sequence which overlies the uppermost aquifer; a small thickness of sandstone which may be part of the uppermost aquifer was also penetrated. Total depth when drilled was 102.0 ft. Perforations are from 62.0 ft to 102 ft. The well is located near the center of the land-treatment area. A slug test was performed on July 3, 1984, following the method described by S. W. Lohman (1972, Ground-Water Hydraulics, U. S. Geol. Survey Prof. Paper 708, p. 27-29), which indicates the permeability of the section open to the well to be about 4×10^{-7} cm/sec.

Well MW-1 This well is one of the monitoring wells on the boundary of the land-treatment area, and is completed in the uppermost aquifer. It was drilled to 120 ft, and is screened in the interval 87 to 120 ft; the casing is sealed above 89 ft so as to isolate the uppermost aquifer. The slug test performed on July 3, 1984 indicated a permeability of about 1.2×10^{-4} cm/sec.

Information as to the construction of the wells is taken from Dames and Moore (March, 1981; Ground water and soils investigation, Ciniza Refinery near Gallup, New Mexico, and November, 1981, Groundwater monitoring plan, Ciniza Refinery near Gallup, New Mexico).

Please let me know if there are questions.

Sincerely,

John W. Shomaker
Consulting Geologist

cc: Tom Andrews, Delta H Engineering w/encl

well: [illegible] OW-4
date: 7-3-84

casing size: nominal 4½" ID 4.0 csg. matl. PVC
water levels measured from top 4½ OD PVC casing, S side,
which is 1.7 ± above ground level.
volume of slug:

OD, ft $\left(\frac{0.27}{0.30} \times \frac{1}{2}\right)^2 \times \pi \times$ length, ft		=	
0.243	0.10		0.006 ft^3
0.27	0.04		0.003
0.243	4.84		0.224
0.27	0.26		0.015
0.18	4.81		0.223
0.11	0.26		0.015
	0.03		0.001
	0.25		0.002
	sum		0.489 = V, ft^3 = 3.66 gal.

Note- obstruction in casing at 33. won't pass 0.27 OD.

r_c = internal radius of casing above perfs: 0.165 ft

r_s = radius of screen or open hole: _____ ft

initial water level 26.15 ft below MP, time 07:51

$$H_o = \frac{V}{\pi r_c^2} = \frac{0.489}{\pi (0.165)^2} = 5.72 \text{ ft}$$

clock time	t, sec.	water level	H	H/H_o	remarks
08:20:54	0				slug released top slug: 23.2' MP
21:25?	31?	20.75	5.40	0.944	
22:28	94	20.76	5.39	0.942	
23:14	140	20.80	5.35	0.935	
23:51	177	20.81	5.34	0.934	
24:42	228	20.83	5.32	0.930	
25:42	288	20.87	5.28	0.923	
27:06	372	20.90	5.25	0.918	
28:14	440	20.92	5.23	0.914	
29:43	529	20.95	5.20	0.909	
30:55	601	20.97	5.18	0.906	
32:46	712	21.00	5.15	0.900	
35:16	862	21.04	5.11	0.893	
38:38	1064	21.10	5.05	0.883	
43:30	1356	21.19	4.96	0.867	
46:52	1558	21.21	4.94	0.864	raised slug 0.4ft.
49:26	1712	21.25	4.90	0.857	
52:54	1920	21.30	4.85	0.848	

t_0 = 08:20:54

0:00 = 2346

clock time	t, sec.	level	H	H/H₀	remarks
~~08:54:13~~		~~21.34~~			
08:56:50	2096	21.35	4.80	0.839	
09:00:16	2362	21.39	4.76	0.832	
:05:00	2646	21.45	4.70	0.822	
09:55	2941	21.50	4.65	0.813	
17:46	3412	21.60	4.55	0.795	
28:25	4051	21.71	4.44	0.776	m-scope trouble
46:00	5106	21.89	4.26	0.745	
10:02:23	6089	22.05	4.10	0.717	
14:00	6786	22.15	4.00	0.699	
10:24:26	7412	22.25	3.90	0.682	stopped test; slug almost uncovered

late data matches: $\alpha = 10^{-1}$ curve, $Tt/r_c^2 = 1$ at $t = 50{,}000$ sec.

$$T = \frac{1.0\, r_c^2}{t} = \frac{(1.0)(0.165)^2}{50{,}000} = 5.4 \times 10^{-7}\ ft^2/sec$$

$$= 0.05\ ft^2/day = 0.35\ gpd/ft$$

$$K_h = \frac{0.05\ ft^2/day}{40\ ft\ screen} = 0.001\ ft/day$$

$$0.001\ ft/day \times 30.5\ cm/ft \times \frac{1}{60 \times 1440\ sec/day} = 4 \times 10^{-7}\ cm/sec$$

$$S = \frac{r_c^2}{r_s^2}\,\alpha \approx \frac{0.027}{0.080}\,10^{-1} = 0.03 \therefore \text{water-table storage}$$

6¾" hole!

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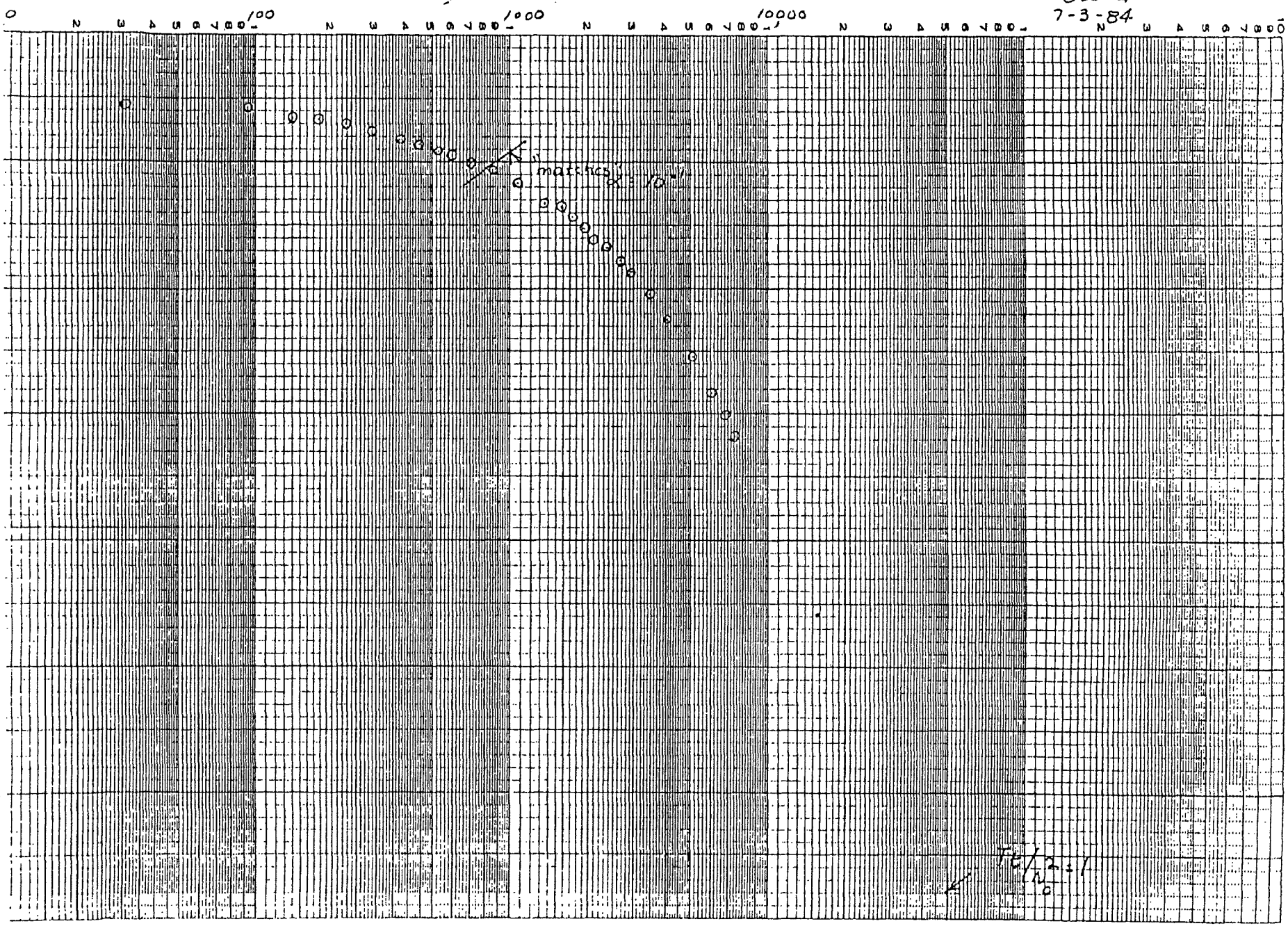

OW-4
7-3-84

date: 7-2-84

casing size: nominal 5 1/2" OD, ID 5.1" csg. matl. PVC
water levels measured from top PVC casing, SW side
which is 1.37 ft above ground level, (concrete slab)

2.05
.68
1.37

volume of slug:

cap OD, ft $\left(\frac{0.37}{2}\right)^2 \times \pi \times$ length, ft

0.39	0.10	0.011 ft^3
0.33	0.05	0.006
0.38	4.81	0.411
0.33	0.28	0.032
0.42	0.04	0.003
0.29	0.04	0.006
0.16	0.03	0.002
0.11	0.03	0.001
	0.25	0.002

sum 0.474 = V, ft^3 = 3.55 gal

r_c = internal radius of casing above perfs: 0.211 ft

r_s = radius of screen or open hole: _____ ft

initial water level 5.72 ft below MP, time 13:32

$$H_o = \frac{V}{\pi r_c^2} = \frac{0.474}{\pi (0.211)^2} = 3.389 \text{ ft}$$

clock time	t, sec.	water level	H	H/H_o	remarks
13:48:00	0				slug released
13:48:20	20	2.30 ft ?	3.42	1.009	??
49:00	60	2.36	3.36	0.991	
49:26	86	2.42	3.30	0.974	
49:52	112	2.44	3.28	0.968	
50:32	152	2.50	3.22	0.950	
51:05	185	2.56	3.16	0.932	
51:42	222	2.60	3.12	0.921	
52:19	259	2.65	3.07	0.906	
52:55	295	2.70	3.02	0.891	
53:33	333	2.74	2.98	0.879	
54:26	386	2.80	2.92	0.862	
55:30	450	2.86	2.86	0.844	
57:05	545	2.97	2.75	0.811	
59:12	672	3.10	2.62	0.773	
14:01:05	785	3.20	2.52	0.744	
02:26	868	3.28	2.44	0.720	
03:52	952	3.36	2.36	0.696	

clock time	t, sec.	level	H	H/H_o	remarks
14:05:38	1058	3.45	2.27	0.670	
07:22	1162	3.54	2.18	0.643	
09:16	1276	3.62	2.10	0.620	
11:01	1381	3.69	2.03	0.599	
13:17	1517	3.79	1.93	0.569	
15:59	1679	3.89	1.83	0.540	
18:14	1814	3.97	1.75	0.516	
20:40	1960	4.07	1.65	0.487	
23:15	2115	4.15	1.57	0.463	
25:44	2264	4.22	1.50	0.443	
28:45	2445	4.31	1.41	0.416	
33:09	2709	4.43	1.29	0.381	
36:51	2931	4.52	1.20	0.354	
41:56	3236	4.64	1.08	0.319	
46:19	3499	4.71	1.01	0.298	
50:03	3723	4.78	0.94	0.277	
57:39	4179	4.90	0.82	0.242	
15:05:36	4356	5.01	0.71	0.210	
14:12	5172	5.12	0.60	0.177	
21:12	5592	5.18	0.54	0.159	
33:01	6301	5.28	0.44	0.130	
44:35	6995	5.36	0.36	0.106	
53:43	7543	5.40	0.32	0.094	
16:08:22	8422	5.46	0.26	0.077	
26:59	9539	5.52	0.20	0.059	
47:10	10,750.	5.56	0.16	0.047	
17:00:20	11,540	5.58	0.14	0.041	

late data matches: $\alpha = 10^{-5}$ curve, $Tt/r_c^2 = 1$ at $t = 830$ sec.

$$T = \frac{1.0\, r_c^2}{t} = \frac{(1.0)(0.21)^2}{830} = 5.36 \times 10^{-5}\ ft^2/sec$$

$$= 4.63\ ft^2/day = 35\ gpd/ft$$

$$K_h = \frac{4.63\ ft^2/day}{13.3\ ft\ screened} = 0.35\ ft/day$$

$$0.35\ ft/day \times 30.5\ cm/ft \times \frac{1}{60 \times 1440\ sec/day} = 1.2 \times 10^{-4}\ cm/sec$$

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MW-1
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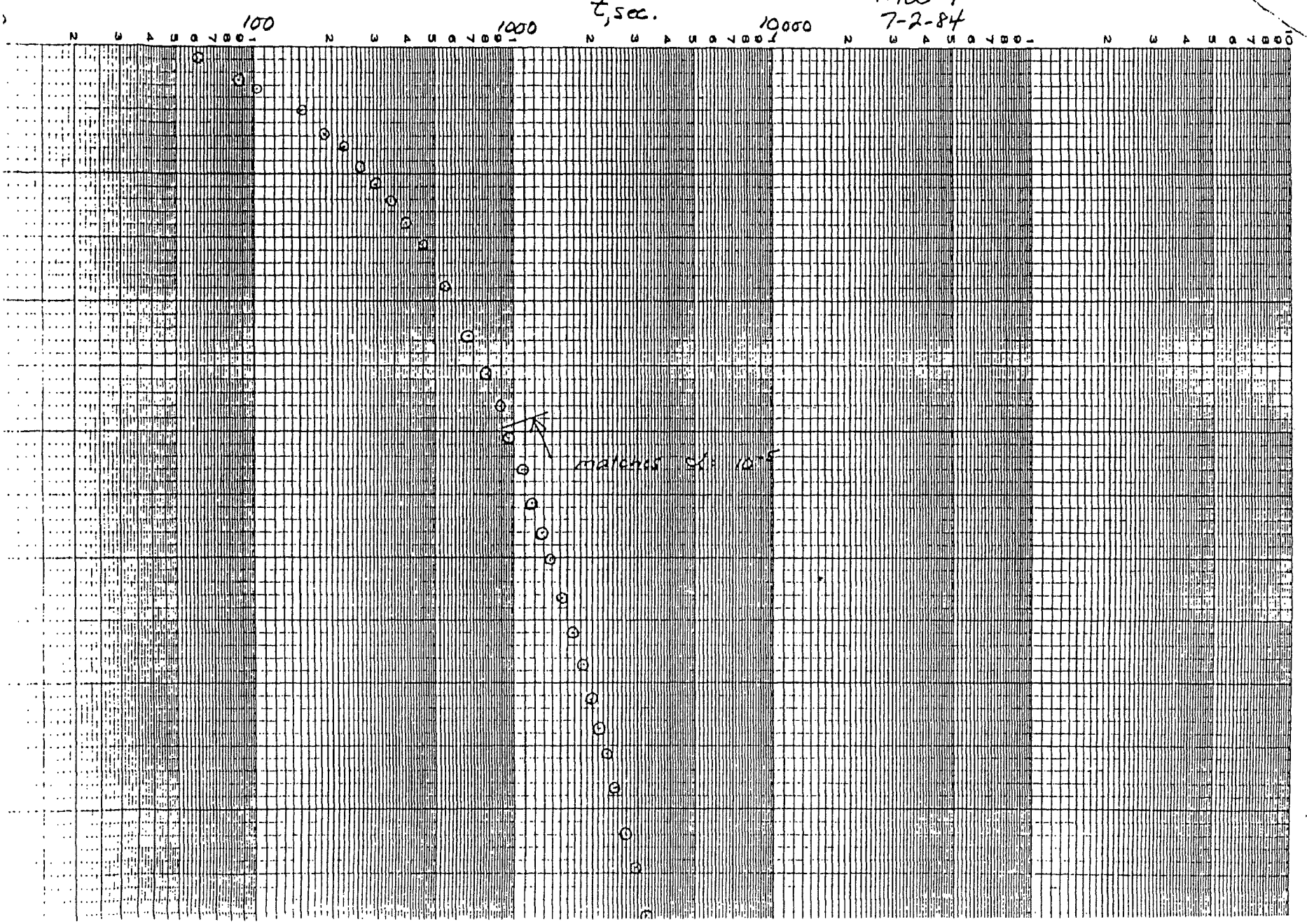

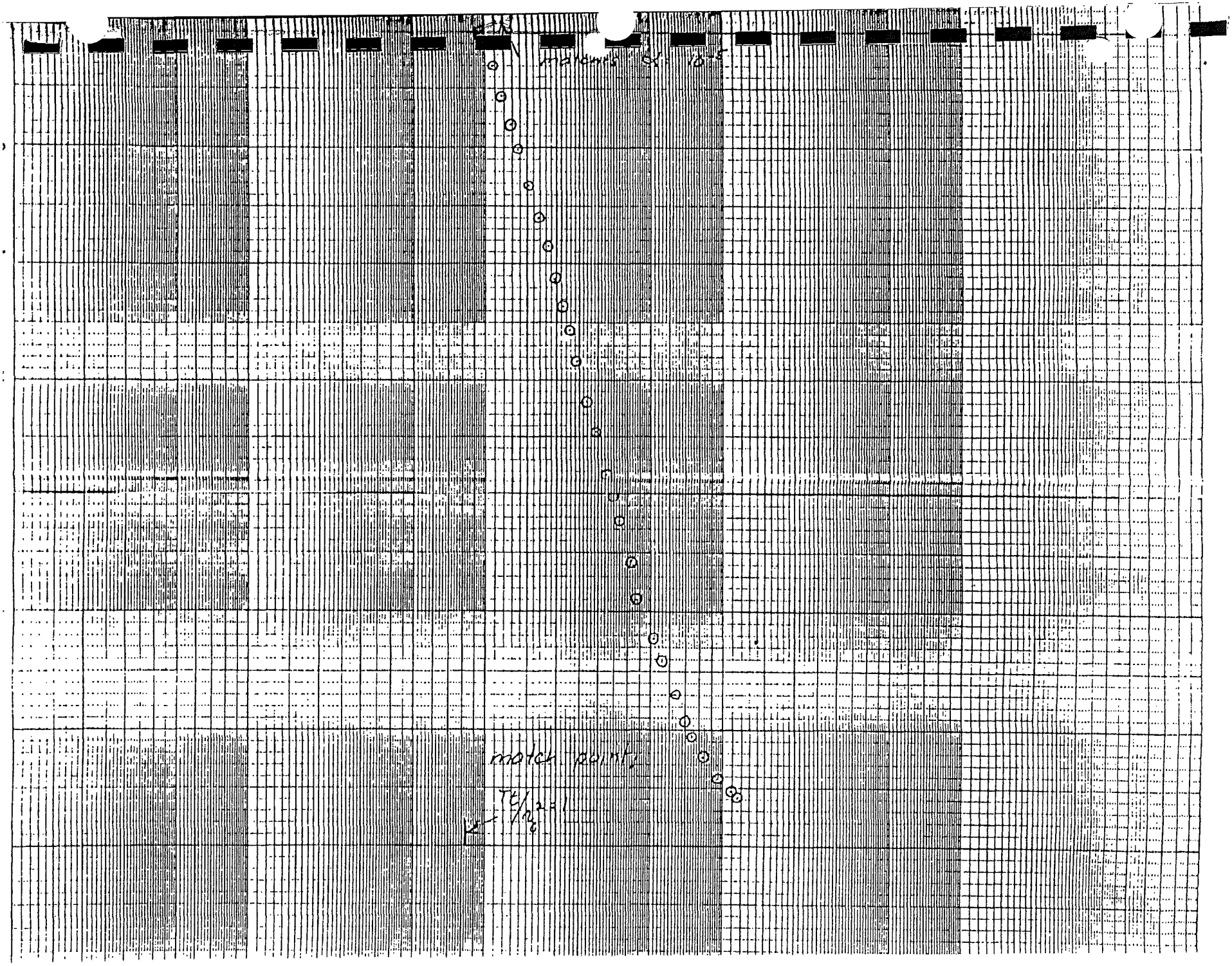
match point
$\frac{T_t}{n_e^2} = 1$

APPENDIX C
RCRA POST-CLOSURE CARE PERMIT APPLICATION
LAND TREATMENT UNIT
GIANT REFINING COMPANY
CINIZA REFINERY

May 2000

RCRA Part A and Part B
Post-Closure Permit Application
Land Treatment Unit
May 2000

APPENDIX C

Land Treatment Unit Historical Information and Data

LAND TREATMENT UNIT HISTORICAL INFORMATION AND DATA

1.0 LAND TREATMENT HISTORY

Historical LTU information and data extracted from existing permit applications, operating permits, operating records, and other source documents are provided as Appendix C. The inclusion of this appendix does not imply that historical information and data have been verified.

In August 1980, Ciniza Refinery (Ciniza) notified the U.S. Environmental Protection Agency (EPA) that it was a generator and operator of a hazardous waste management facility. In November 1980, Ciniza submitted a Part A permit application as an "existing facility" (defined at 40 *Code of Federal Regulations* §260.10). This granted Ciniza interim status for their Land Treatment Unit (LTU) operations. In response to notice from the Regional Administrator, Ciniza submitted a Part B permit application in December 1983. Based on changing guidance, Ciniza submitted a land treatment demonstration plan (LTD) and an application for a two-phase LTD permit in April 1985. On February 9, 1987, Ciniza was issued a Short-term LTD Permit (NMD000333211-1) to conduct a hazardous waste land LTD. The LTD was conducted to identify the land treatment capabilities for refinery waste generated by Ciniza. The LTD defined waste management parameters (e.g., rate-limiting constituent, application-limiting constituent, capacity-limiting constituent, and unit life of the LTU). This was accomplished by identifying the Principal Hazardous Constituents (PHCs) present in refinery waste streams and measuring their degradation, transformation, and immobilization in the treatment zone of the LTU. From the results of the LTD and a modified Part B permit application, Ciniza was issued a Hazardous Waste Facility Permit (NMD 000333211-2) on November 4, 1988. Ciniza has not applied hazardous wastes to the LTU since November 8, 1990.

1.1 Land Treatment Program [20 NMAC 4.1, Subpart IX, §270.20(b)]

Ciniza's Hazardous Waste Facility Permit established operational requirements for the LTU. These requirements inchinclude procedural and engineering controls necessary to ensure that hazardous constituents are fully treated within the LTU without uncontrolled release to the environment.

The LTU consists of a treatment zone of soil extending 5 ft deep from the original soil surface. This depth is shallow enough to ensure that the treatment zone is more than 3 ft above the seasonal high water table. The zone of incorporation (ZOI) within the treatment zone is the volume of soil to which the waste was directly applied.

The ZOI for the Ciniza LTU is the top 12 in. of the treatment zone. The LTU was designed and constructed to prevent both washout of any hazardous waste and to prevent inundation of and discharge from the permitted unit through the use of a continuous dike which surrounds the LTU at an elevation of 3 ft above the natural grade.

The ZOI was tilled during permitted operations to encourage aerobic microbial activity and improve chemical reaction rates. During active treatment soil nutrients were applied, as necessary, to optimize carbon:nitrogen: phosphorous (C:N:P) ratios. Applications of Ciniza wastes to the LTU were limited to ensure that treatment processes were not overwhelmed or poisoned. Performance indicators (e.g., soil moisture, pH, total organic carbon) were monitored in the ZOI to ensure that treatment was proceeding.

1.2 Treatment Zone Description [20 NMAC 4.1, Subpart IX, §270.20(b)(2) and §270.20(b)(5)]

The LTU consists of three 480-by-240-ft sections, each of which contain 2.6 acres (1.0 hectares) of available treatment surface. Each section is delineated by a continuous dike to prevent site runon and runoff. The treatment zone extends 5-ft deep from the top of the soil within the diked section. The top 12 in. of the treatment zone is the ZOI. The ZOI is tilled when active to encourage aerobic degradation of organics and to maintain moisture content of the soil. This leaves 4 ft of the treatment zone undisturbed.

The soil within the treatment zone is silty clay containing closely-spaced root systems in the uppermost 3 to 4 ft. Field infiltration rates (the rate at which water penetrates into the soil surface) averages 1.0×10^{-3} cm/sec or 3.6 cm/hr. Soil permeability as determined by laboratory measurements averages 1.9×10^{-5} cm/sec or 6.8×10^{-2} cm/hr for three locations at the 6- to 12-in. depth. Field infiltration rate allows prediction of runoff and erosion; permeability (hydraulic conductivity) allows estimation of vertical water movement rates in the soil. The treatment zone soils have a saturated hydraulic conductivity rating of "moderately low" by the U.S. Department of Agriculture Class (Giant Refining Company Part B Permit Application 1984). The low permeability of the treatment zone soil assists in retarding the vertical movement of hazardous constituents through the treatment zone.

The silty clay soil has a high cation exchange capacity (CEC). The CEC is the total amount of exchangeable cations that the soil has to exchange with cations in the soil solution. The exchangeable cations in the LTU are the heavy metals present in the Ciniza wastes. The high CEC results in high sorption of heavy metals in the LTU soils, assuming other factors (such as soil pH) are favorable.

RECENT SOIL PERMEABILITY TESTS
FIREWATER POND CONSTRUCTION PROJECT

GRCC

Precision Engineering, Inc.

P.O. Box 422
Las Cruces, NM 88004
505-523-7674

Proposed Fire Water Storage

Rigid Wall Hydraulic Conductivity
Falling Head

ATTN: James Romero
Giant Refining Company
Route 3, Box 7
Gallup, NM 87301

Project: Ciniza Fire Water Lagoon File No.: 05-100
Soil Type: Silty Clay Date: October 13, 2005 Lab No.: 47872
Sampled From: Boring 05-100-1(2.5'-3.0') Performed By: GG

TEST SPECIMEN CONDITIONS AT BEGINING OF TEST:

Wet Unit Weight: 120.8 pcf
Dry Unit Weight: 109.0 pcf

% Moisture: 10.8
% Compaction: n/a
% Compaction Requested: n/a

PROCTOR INFORMATION:

Maximum Dry Density: n/a pcf
Optimum Moisture Content: n/a %

Coefficient of Permeability, k_{20}: 1.1×10^{-7} cm/sec. avg

Remarks: Avg of three: 1.1×10^{-7}, 1.1×10^{-7}, 1.1×10^{-7}

C:\bill\Projects\2005\05100cinizafirewtr\[Permeability.xls]Report

Reviewed By: Reviewed By: Certified By:

05-100
SWMU NO. 1
ALU 2
ALU 1
Lineal: 1.0
SW Com
Lagoon
Elevation: 562
Boring No.: 05-100-1
LAB #
DEPTH
BLOW
COUN
0.0-5.0

...SW Corner of Proposed
...er Lagoon
Elevation: -98.2@TD,-27@1 hr
...ing No.: 05-100-1

Precision Engineering, In...
P.O. Box 422
Las Cruces, NM 88004
505-523-7674

File #: 05-100
Site: Giant-Ciniza

Elevation: EXISTING
Date: 9/24/2005

Log of Test Borings

LAB #	DEPTH	BLOW COUNT	PLOT	SCALE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR,ETC.)	%M	LL	PI	CLASS.
	0.0-5.0				**Clay**, Very Silty, Sandy, Very Fine, Dark Red, Wet, Firm				
47672				2.5	[2.5-3.0 hydraulic conductivity sample]				
	5.0-10.0			5.0	**Same As Above**, Wet, Soft				
				7.5					
	10.0-15.0			10.0	**Same As Above**				
	15.0-16.0			15.0	**Same As Above**				
	16.0-17.5				**Sand**, Very Fine, Very Clayey, Very Silty, Weak Water Bearing, Moderately Dense, Dark Red/Brown				
	17.5-21.5				**Clay**, Dark Red, Wet, Soft				
				20.0					

SIZE & TYPE OF BORING: 4 1/4" ID HOLLOW STEMMED AUGER LOGGED BY WHK

C:\bill\Projects\2005\05100ciniza\rewt\[Boring 1.xls]Sheet1

Sheet: 2 OF 5
Bore Point: SW Corner of Proposed
Fire Water Lagoon
Water Elevation:
Boring No.: 05-100-1

Precision Engineering, Inc.
P.O. Box 422
Las Cruces, NM 88004
505-523-7674

File #:
Site: G
Elevation: EXISTIN
Date: 9/24/2005

Log of Test Borings

LAB #	DEPTH	BLOW COUNT	PLOT	SCALE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR,ETC.)	%M	LL	PI	CLASS
	21.5-22.1				**Clay**, Sandy, Dark Brown, Wet, Stiff				
	22.1-23.5				**Clay**, Hard, Red/Brown (Brighter than Above), Wet/Moist				
	23.5-25.1				**Pertrified Forest Formation**				
					Mudstone/Claystone, Weathered, Some Grey/Green Reduction Spots, Generally Red/ Brown, Fissile to Crumbly, Damp/Moist				
				25.0					
	25.0-30.0				**Mudstone**, As Above, Few Reduction Spots, Damp/Dry				
				30.0					
	30.0-35.0				**Same As Above dry**				
				35.0					
	35.0-40.0				**Same As Above** dry				
				40.0					
	40.0-45.0				**Same As Above**, Brighter Red @ 44.5'-45.0', dry				
	41.5				siltstone/mudstone, dry, very dense,bright red brown				

SIZE & TYPE OF BORING: 4 1/4" ID HOLLOW STEMMED AUGER LOGGED BY: WHK

C:\bill\Projects\2005\05100cin\zafirewtr\[Boring 1.xls]Sheet1A

Sheet: 2 OF 5
Bore Point: SW Corner of Proposed
Fire Water Lagoon
Water Elevation:
Boring No.: 05-100-1

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Las Cruces, NM 88004
505-523-7674

File #: Sheet: 3 of
Site: Gila SW Corner Lagoon
Elevation: EXISTING Water Elevation:
Date: 9/24/2005 Boring No.: 05-100-

Log of Test Borings

LAB #	DEPTH	BLOW COUNT	PLOT	SCALE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR,ETC.)	%M	LL	PI	CLASS.
	21.5-22.1				Clay, Sandy, Dark Brown, Wet, Stiff				
	22.1-23.5				Clay, Hard, Red/Brown (Brighter than Above), Wet/Moist				
	23.5-25.1				Pertrified Forest Formation Mudstone/Claystone, Weathered, Some Grey/Green Reduction Spots, Generally Red/ Brown, Fissile to Crumbly, Damp/Moist				
				25.0					
	25.0-30.0				Mudstone, As Above, Few Reduction Spots, Damp/Dry				
				30.0					
	30.0-35.0				Same As Above dry				
				35.0					
	35.0-40.0				Same As Above dry				
				40.0					
	40.0-45.0				Same As Above, Brighter Red @ 44.5'-45.0', dry				
	41.5				siltstone/mudstone, dry, very dense,bright red brown				

SIZE & TYPE OF BORING: 4 1/4" ID HOLLOW STEMMED AUGER LOGGED BY: WHK

C:\bill\Projects\2005\05100cinizafirewtr\[Boring 1.xls]Sheet1A

Boring Location: SW Corner of Proposed Canopy
Date: 9/24/2005
Lab No: 05-100-1

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File #: 05-100
Site: Giant-Ciniza

Elevation: EXISTING
Date: 9/24/2005

Log of Test Borings

LAB #	DEPTH	BLOW COUNT	PLOT	SCALE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR ETC.)	%M	LL	PI	CLASS.
	45.0-50.0			45.0	**Mudstone/Siltstone**, Bright Red/Brown, Dry Very Dense				
	50.0-55.0			50.0	**Same As Above**				
	55.0-60.0			55.0	**Same As Above**				
	60.0-65.0			60.0	**Same As Above**				

SIZE & TYPE OF BORING: 4 1/4" ID HOLLOW STEMMED AUGER

LOGGED BY: WHK

C:\bill\Projects\2005\05100ciniza\rewtr\[Boring 1.xls]Sheet1B

Sheet: 4 OF 5
Bore Point: SW Corner of Proposed
Fire Water Lagoon
Water Elevation:
Boring No.: 05-100-1

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Las Cruces, NM 88004
505-523-7674

File #: Sheet: 5 of 5
Site: SW Corner of Fire Water Lagoon
Elevation: Existing Elevation
Date: 9/24/2005
Boring No.: 05-100-1

Log of Test Borings

LAB #	DEPTH	BLOW COUNT	PLOT	SCALE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR,ETC.)	%M	LL	PI	CLASS
				65.0					
	65.0-66.2				Same As Above				
	66.2-67.4				Sandstone, Fine, Red/Brown, Hard, Fissile, Grey/Green Orbicular Reduction Spots Abundant, Dry				
	67.4-78.0				Sandstone/Siltstone Interbeds, Some Mudstone, Dark Red/Brown, Hard, Dry				
				70.0					
				75.0					
	78.0-79.1				Mudstone, Fissile, Dry, Red/Brown, Some Grey/Green Reduction Spots				
	79.1-97.7			80.0	Sandstone, Fine, Red/Brown, Fissile, Hard, Feldspathic, Bedded 6" to 1.0', White Mottled Upper Sonsela Member				
				85.0					

SIZE & TYPE OF BORING: 4 1/4" ID HOLLOW STEMMED AUGER LOGGED BY: WHK

C:\bill\Projects\2005\05100cinizafirewtr\[Boring 1.xls]Sheet1C

File #: 05-100-1
Site: Corr Corner of Proposed Lagoon
Elevation:
Date: 9/24/2005

Precision Engineering, Inc.
P.O. Box 422
Las Cruces, NM 88004
505-523-7674

File #: 05-100
Site: Giant-Ciniza

Elevation: EXISTING
Date: 9/24/2005

Log of Test Borings

LAB #	DEPTH	BLOW COUNT	PLOT	SCALE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR,ETC.)	%M	LL	PI	CLASS.
					Upper Sonsela Member Continued (dry)				
				90.0					
				95.0					
	97.7-98.2				**Mudstone**, Hard, Dry, Green/Grey-White				
	98.2-101.6			100.0	**Sandstone**, Fine to Medium, Quartz Grains, Water Bearing, Hard, (Sonsela Member, Petrified Forest Formation, Chinle Group)				
	101.6			105.0	TD Boring continuopusly sampled using 5' split barreled intrusion sampler. Boring closed using 10' of 3/8" TR-30 Pel Plug capped with 50' of 8% bentonite cement slurry and backfilled to the ground surface with cuttings.				

SIZE & TYPE OF BORING: 4 1/4" ID HOLLOW STEMMED AUGER LOGGED BY: WHK

C:\bill\Projects\2005\05100cinizafirewtr\[Boring 1.xls]Sheet1D

Appendix D

Boring Logs

LOG OF BORING

Boring No.: SWMU 1-1
Start Date: 10/5/2012 1215
Finish Date: 10/5/2012 1430

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 14' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Comments: N 35°29.447' W 108°25.774'; Reamed to 12', set temporary well 3-8' bgl

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0					12.9 72°F		50	**Fill (Silty Clay)** Low plasticity, stiff, brown, dry, faint odor at base
2	2-4'	1410	G/ 2M/3J		245 72°F		50	**Fill (Silty Clay)** Similar to above, black staining, strong odor
4							--	No Recovery
6					333 72°F		50	**Silty Clay (CL)** Low plasticity, soft, damp, odor
8					144 72°F		60	**Clay (CH)** High plasticity, very stiff, dry to damp, odor
10	10-12'	1415	G/ 2M/1J		399 72°F		30	**Clay (CH)** Similar to above
12					148 77°F		90	**Clay (CH)** Similar to above
14	13-14'	1430	G/ 2M/3J		199 77°F			**Petrified Forest Formation (Sandstone)** Very dense, dry, gray, no odor
16								Total Depth = 14' BGL
18								
20								
22								

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Austin, Texas 78746

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.448' W 108°25.813'

Total Depth: 20' bgl
Ground Water: Saturated @ 8' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-2
Start Date: 10/2/2012 0745
Finish Date: 10/2/2012 1115

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
0								Ground Surface
					3 41°F		60	**Silty Clay (CL)** Low plasticity, firm, damp, reddish brown, no odor, trace calcareous
2					3.7 41°F		80	**Silty Clay (CL)** Similar to above
4					6.1 41°F		90	**Silty Clay (CL)** Low plasticity, soft, damp, reddish brown, no odor
6	6-8'	1000	G/2S 2M/3J	8' bgl	2.8 41°F		100	**Silty Clay (CL)** Similar to above, very soft, no odor
8							0	No Recovery
10	10- 11'	1020	G/2S 2M/3J		4.7 44°F		90	**Clayey Sand (SC)** Fine grain, compact, saturated, brown, no odor
					4.3 44°F			**Clay (CL)** Moderate to low plasticity, firm, damp, reddish brown, no odor
12					3.2 44°F		90	**Clay (CH)** High plasticity, firm, damp, dark reddish brown, no odor
14								

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LOG OF BORING

Boring No.: SWMU 1-2
Start Date: 10/2/2012 0745
Finish Date: 10/2/2012 1115

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.448' W 108°25.813'

Total Depth: 20' bgl
Ground Water: Saturated @ 8' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
	14-16'	1035	G/2S 2M/3J		3.7 46°F		90	**Clayey Sand (SC)** Fine grain, compact, saturated, brown, no odor	
16								**Clay (CH)** High plasticity, firm, damp, brown, odor	16
	17-17.25'	1050	G/2S 2M/3J		7.2 48°F		90	**Clayey Sand (SC)** Fine grain, loose, saturated, brown, odor	
18								**Clay (CH)** High plasticity, firm, damp, brown, odor, trace gravel	18
					2.9 53°F		90	**Clay (CH)** Similar to above	
	19.5-20'	1105	G/2S 2M/2J		2.3 53°F			**Clayey Sand (SC)** Fine grain, loose, saturated, brown, no odor	
20								**Clay (CH)** High plasticity, firm, damp, brown, odor, trace gravel	20
22								**Petrified Forest Formation - Mudstone/Sandstone** Dense, damp, gray reddish brown, no odor, weathered	22
								Total Depth = 20' BGL	
	SWMU 1-2 GW	1345							
24									24
26									26
28									28

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LOG OF BORING

Boring No.: SWMU 1-3
Start Date: 10/2/2012 1440
Finish Date: 10/2/2012 1745

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 20' bgl
Ground Water: Saturated @ 11' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Comments: N 35°29.466' W 108°25.829'; Set well screen - no fluid detected

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0					17.3 81°F		50	**Silty Clay (CL)** Low plasticity, firm, damp, brown, gravel present, no odor
2	2-4'	1620	G/2S 2M/3J		21.3 81°F		60	**Silty Clay (CL)** Similar to above, reddish brown, no odor
4					10.3 80°F		60	**Silty Clay (CL)** Similar to above, reddish brown, no odor, gravel present
6					18.9 80°F		100	**Silty Clay (CL)** Low plasticity, very soft, damp, reddish brown, no odor
8					14.2 80°F		60	**Silty Clay (CL)** Similar to above, no odor
10	10-11'	1635	G/2S 2M/3J	11' bgl	16.3 80°F		70	**Silty Clay (CL)** Similar to above, no odor
	11-11.25'	1650	G/2S 2M/1J		12.3 80°F		90	**Clayey Sand (SC)** Fine grain sand, compact, moist to saturated
12					7.4 80°F		80	**Clay (CH)** High plasticity, firm, damp, reddish brown, no odor **Clay (CH)** Similar to above, no odor
14					8.9 78°F		100	**Clay (CH)** Similar to above, no odor
16					11.3 78°F			
					10.7		90	**Clay (CH)** High plasticity, firm, damp, reddish brown, no odor

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LOG OF BORING

Boring No.: SWMU 1-3
Start Date: 10/2/2012 1440
Finish Date: 10/2/2012 1745

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 20' bgl
Ground Water: Saturated @ 11' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Comments: N 35°29.466' W 108°25.829'; Set well screen - no fluid detected

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
					78°F			**Sandy Clay/Clayey Sand (CL/SC)** Low plasticity, soft, very fine grain, damp, reddish brown, no odor
18					5.4			**Clayey Sand (SC)** Similar to above, very moist to slightly saturated, no odor
	18.5-19.5'	1710	G/2S 2M/3J		78°F		60	
	19.5-20'	1725	G/2S 2M/2J		6.1 78°F			**Petrified Forest Formation - Mudstone** Very dense, dry, reddish brown, no odor
20								Total Depth = 20' BGL
22								
	EB100212	1745						
24								
26								
28								
30								
32								

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LOG OF BORING

Boring No.: SWMU 1-4
Start Date: 10/3/2012 1115
Finish Date: 10/3/2012 1530

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 24' bgl
Ground Water: Saturated at 10' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Comments: N 35°29.498' W 108°25.827'; Set temporary screen 16-21' bgl and sanded on 10/3/2012

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0					2.9 75°F		60	**Silty Clay (CL)** Low plasticity, stiff, dry, reddish brown, gravel, no odor	0
2					3.8 75°F		60	**Silty Clay (CL)** Similar to above, no odor	2
4					3.0 75°F		10	**Silty Clay (CL)** Similar to above, no odor	4
6					3.1 75°F		50	**Silty Clay (CL)** Low plasticity, firm, damp, reddish brown	6
8	8-10'	1300	G/2S 2M/3J	10' bgl	3.1 75°F		60	**Silty Clay (CL)** Similar to above, trace gravel, no odor	8
10	10-12' &Dup	1315	G/4S 4M/2J		7.8 78°F		60	**Clayey Sand (SC)** Fine grain, compact, moist to saturated, reddish brown, no odor	10
12					13.2 78°F		60	**Silty Clay (CL)** Low plasticity, soft, damp, reddish brown, no odor	12
14							--	No Recovery	14
16					11.8 80°F		90	**Silty Clay (CL)** Similar to above, black staining and odor	16
18	17-18'	1345	G/2S 2M/3J		16.4 80°F			**Sandy Clay/Clayey Sand (SC/CL)** Fine grain, compact, moist to saturated, odor	18
					8.5 80°F		90	**Sandy Clay (CL)** Similar to above, moist to saturated, odor	
20					8.5 79°F		60	**Clay (CH)** High plasticity, stiff to firm, damp, reddish brown, odor	20
22									22

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LOG OF BORING

Boring No.: SWMU 1-4
Start Date: 10/3/2012 1115
Finish Date: 10/3/2012 1530

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 24' bgl
Ground Water: Saturated at 10' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Comments: N 35°29.498' W 108°25.827'; Set temporary screen 16-21' bgl and sanded on 10/3/2012

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
23	23-24'	1400	G/2S 2M/3J		5.6 79°F 5.2 79°F		90	**Clay (CH)** Similar to above, very stiff	23
								Petrified Forest Formation - Mudstone Dry, reddish brown to gray, weathered, no odor	
25								Total Depth = 24' BGL	25
27									27
29									29
31									31
33									33
35									35
37									37
39									39
41									41
43									43

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.525' W 108°25.824'

Total Depth: 28' bgl
Ground Water: Saturated at 25' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-5
Start Date: 10/3/2012 1530
Finish Date: 10/3/2012 1830

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0					6.8 75°F		60	**Fill (Silty Clay)** Low plasticity, stiff, dry to damp, no odor	0
2					8.1 75°F		60	**Silty Clay (CL)** Similar to above, no odor	2
4					8.4 75°F		60	**Silty Clay (CL)** Similar to above, no odor	4
6					2.5 75°F		90	**Silty Clay (CL)** Low plasticity, firm to soft, reddish brown, damp, no odor	6
8					3.8 75°F		90	**Silty Clay (CL)** Similar to above, no odor	8
10	10-12'	1730	G/2S 2M/3J		9.8 74°F		60	**Clayey Sand (SC)** Fine grain, loose to compact, damp, brown, sandstone gravel present, no odor	10
12					8.2 74°F		40	**Silty Clay/Clay (CL)** Moderate to low plasticity, soft, damp, reddish brown, no odor, trace gravel	12
14	14-16-	1745	G/2S 2M/3J		11.0 74°F		60	**Sandy Clay/Clayey Sand (SC/CL)** Fine grain, loose to compact, damp, reddish brown/brown, calcareous gravel present	14
16	16-18'	1800	G/2S 2M/3J		16.1 76°F		90	**Gravelly Clay (CL)** Low plasticity, soft/crumbly, damp, reddish brown, no odor	16
18					12.8 76°F		90	**Gravelly Clay (CL)** Similar to above, slightly more plastic, no odor	18
20					5.7 75°F		90	**Gravelly Clay (CL)** Similar to above	20
22									22

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LOG OF BORING

Boring No.: SWMU 1-5
Start Date: 10/3/2012 1530
Finish Date: 10/3/2012 1830

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.525' W 108°25.824'

Total Depth: 28' bgl
Ground Water: Saturated at 25' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
				25' bgl	5.5 76°F		95	**Gravelly Clay (CL)** Moderate plasticity, firm, damp, reddish brown, no odor, calcareous, sandstone gravel present, stiff at base
24	24-25'	1810	G/2S 2M/2J		10.9 75°F		50	**Gravelly Clay (CL)** Similar to above, moist at 25' bgl, no recovery from 25-26' bgl
26	26-27'	1820	G/2S 2M/1J		3.0 75°F		70	**Clayey Sand (SC)** Fine grain, loose, saturated, reddish brown, no odor
	27-28'	1830	G/2S 2M/3J		4.1 75°F			**Petrified Forest Formation (Mudstone)** Very dense, dry, gray, weathered
28	EB100312	1844						Total Depth = 28' BGL
30								
32								
34								
36								
38								
40								
42								
44								

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LOG OF BORING

Boring No.: SWMU 1-6
Start Date: 10/4/2012 0950
Finish Date: 10/4/2012 1155

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 12' bgl
Ground Water: Saturated at 4' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Comments: N 35°29.523' W 108°25.802'; Set temporary well 7-12' bgl

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0					10.5 70°F		90	**Fill (Silty Clay/Gravel)** Dry to damp, brown, no odor
2	2-4' &Dup	1055	G/4S 4M/2J	4' bgl	37.5 70°F		90	**Fill (Silty Clay)** Similar to above, damp
4	4-6'	1115	G/2S 2M/2J		15.9 70°F		60	**Clayey Sand (SC)** Medium grained, loose, saturated, reddish brown, no odor
6					5.8 70°F		60	**Clayey Sand (SC)** Similar to above, saturated
8	7.5-8'	1130	G/2S 2M/2J	9' bgl	4.9 70°F		90	**Silty Clay (CL)** Moderate plasticity, soft, damp to moist, reddish brown, no odor
					7.8 70°F		60	**Silty Clay (CL/SC)** Similar to above, moist to very moist, grades to saturated clayey sand, no odor
10	10-11'	1145	G/2S 2M/2J		9.6 70°F		90	**Clayey Sand (SC)** Medium plasticity, loose, saturated, reddish brown, no odor
12	11-12'	1155	G/2S 2M/3J		0.8 70°F			**Petrified Forest Formation (Mudstone)** Very dense, dry, reddish brown and gray, no odor, weathered
14								Total Depth = 12' BGL
16								
18								
20								
22								

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.501' W 108°25.776'

Total Depth: 18' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-7
Start Date: 10/4/2012 1235
Finish Date: 10/4/2012 1440

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0					7.6 72°F		70	**Fill (Silty Clay (CL))** Low plasticity, firm, dry to damp, brown, no odor
2					4.8 72°F		70	**Silty Clay (CL)** Similar to above, no odor, trace gravel
4					5.1 72°F		70	**Silty Clay (CL)** Similar to above
6					4.0 72°F		50	**Silty Clay (CL)** Low plasticity, soft, damp, reddish brown, no odor, trace gravel
8					1.7 72°F		40	**Silty Clay (CL)** Similar to above, no odor
10					0.5 73°F		60	**Silty Clay (CL)** Similar to above, no odor
12	12-14'	1355	G/2S 2M/3J	14' bgl	0.4 73°F		90	**Clay (CH)** High plasticity, firm to soft, damp, reddish brown, no odor, dark brown organic matter in fractures/fissures
14	14-16'	1415	G/2S 2M/3J		5.9 73°F		70	**Clay (CH)** Similar to above, clayey sand seams present, saturated, no odor, very dense clay at base
16	16-18'	1440	G/2S 2M/3J		2.8 73°F		60	**Petrified Forest Formation - Clay/Mudstone** Very dense, dry, reddish brown to gray, no odor
18								Total Depth = 18' BGL
20								
22								

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LOG OF BORING

Boring No.: SWMU 1-8
Start Date: 10/5/2012 0815
Finish Date: 10/5/2012 1200

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 20' bgl
Ground Water: Saturated @ 12' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Comments: N 35°29.466' W 108°25.768'; Reamed to 18' bgl, Collected full suite (SWMU 1-8 GW)

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0–2					26.5 65°F		60	**Fill (Silty Clay)** Low plasticity, stiff, dry, brown, gravelly, no odor
2–4					9.9 65°F		60	**Fill (Silty Clay)** Similar to above, no odor
4–6	4-6'	1020	G/2S 2M/3J		13.5 65°F		80	**Clayey Sand (SC)** Medium grain, compact, moist to saturated, brown, odor
6–8					8.8 65°F		80	**Silty Clay (CL)** Low plasticity, firm, damp, brown, no odor
8–10					10.0 65°F		20	**Silty Clay (CL)** Similar to above
10–12	10-12'	1030	G/2S 2M/1J	12' bgl	15.8 69°F		10	**Silty Clay (CL)** Similar to above
12–14	12-14'	1040	G/2S 2M/3J		161 69°F		40	**Silty Clay/Clayey Sand (CL/SC)** Low plasticity, very soft, moist to saturated, brown, hydrocarbon odor, gravelly, loose
14–16					9.9 69°F		60	**Clayey Sand (SC)** Medium grain, compact, damp to moist to saturated, brown, odor
16–18	16-18' &Dup	1110	G/4S 4M/6J		8.3 69°F		90	**Clayey Sand/Sandy Clay (SC)** Similar to above, moist to saturated, brown, odor
18–20	19-20'	1125	G/2S 2M/3J		14.0 69°F 10.5 69°F		90	**Clayey Sand (SC)** Similar to above; **Petrified Forest Formation (Mudstone)** Very dense, dry to damp, reddish brown/gray, no odor
20–22	SWMU 1-8 GW	1605						Total Depth = 20' BGL

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LOG OF BORING

Boring No.: SWMU 1-9
Start Date: 10/15/2012 1030
Finish Date: 10/15/2012 1105

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.464' W 108°25.768'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
0								Ground Surface
	0-0.5'	1055	G/2S 2M/3J		3.2 63°F		100	**Fill (Silty Clay/Gravel (CL))** Very dense, compact, dry, brown, no odor
							100	**Fill (Silty Sand (SM))** Fine to medium grain, damp, brown, no odor
	1.5-2'	1105	G/2S 2M/3J		7.0 63°F		100	**Silty Clay (CL)** Low plasticity, soft, damp, brown, no odor
2								Total Depth = 2' BGL
4								
6								
8								
10								
12								

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LOG OF BORING

Boring No.: SWMU 1-10
Start Date: 10/15/2012 1110
Finish Date: 10/15/2012 1130

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.456' W 108°25.766'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1120	G/2S 2M/3J		10.1 68°F		100	**Fill (Silty Clay/ Gravel (CL))** Very dense, compact, dry, brown, no odor	0
	1.5-2'	1130	G/2S 2M/3J		6.1 68°F		100	**Fill (Silty Sand (SM))** Fine to medium grain, damp, brown, no odor, gravelly	
2								Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 1-11
Start Date: 10/15/2012 1140
Finish Date: 10/15/2012 1220

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.449' W 108°25.773'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1205	G/2S 2M/3J		38.9 71°F		100	**Fill (Silty Clay/Gravel (CL))** Very dense, compact, dry to damp, brown, no odor	0
2	1.5-2'	1220	G/2S 2M/3J		3.7 71°F			Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 1-12
Start Date: 10/15/2012 1330
Finish Date: 10/15/2012 1500

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.446' W 108°25.782'

Total Depth: 1' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0								Ground Surface	0
	0-0.5'	1445	G/2S 2M/3J		63 74°F		100	**Fill (Silty Clay/Gravel (CL))** Very dense, compact, dry to damp, brown, no odor, refusal at 1' bgl in gravel	
	0.5-1'	1500	G/2S 2M/3J		4.4 74°F				
								Total Depth = 1' BGL	
2									2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 1-13
Start Date: 10/12/2012 1335
Finish Date: 10/12/2012 1500

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.444' W 108°25.792'

Total Depth: 6' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1405	G/2S 2M/3J		3.1 70°F		80	**Fill (Silty Clay (CL))** Low plasticity, stiff, dry to damp, brown, gravelly, no odor	0
2	1.5-2'	1425	G/2S 2M/3J						2
	2-4'	1435	G/2S 2M/3J		35.7 70°F		90	**Fill (Silty Clay (CL))** Similar to above, no odor	
4	4-6' &Dup	1500	G/4S 4M/4J		15.6 70°F		90	**Fill (Silty Clay (CL))** Similar to above, reddish brown, no odor	4
6								Total Depth = 6' BGL	6
8	EB101212	1620							8
10									10
12									12
14									14
16									16
18									18
20									20
22									22

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LOG OF BORING

Boring No.: SWMU 1-14
Start Date: 10/15/2012 1505
Finish Date: 10/15/2012 1555

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.444' W 108°25.802'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0								Ground Surface	0
	0-0.5'	1530	G/2S 2M/3J		5.7 72°F		100	**Fill (Silty Clay/Gravel (CL))** Firm, dry to damp, brown, no odor	
	1.5-2' &Dup	1555	G/4S 4M/6J		4.7 72°F		100	**Fill (Clay (CH))** High plasticity, firm, damp, brown, no odor	
2								Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 1-15
Start Date: 10/15/2012 1600
Finish Date: 10/15/2012 1630

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.445' W 108°25.811'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0								Ground Surface	0
	0-0.5'	1620	G/2S 2M/3J		5.7 70°F		100	**Fill (Silt/Silty Clay (ML/CL))** Firm, dry to damp, brown, no odor	
	1.5-2'	1630	G/2S 2M/3J		9.3 70°F		100	**Fill (Clay (CH))** High plasticity, firm, damp, brown, no odor	
2								Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 1-16
Start Date: 10/15/2012 1635
Finish Date: 10/15/2012 1705

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.449' W 108°25.824'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
0								Ground Surface
	0-0.5'	1655	G/2S 2M/3J		7.7 69°F		100	**Fill (Silt/Gravel (ML))** Fine grain, loose, brown, dry, no odor
	1.5-2'	1705	G/2S 2M/3J		5.7 69°F		100	**Fill (Silty Clay/Gravel (CL))** Moderate to high plasticity, firm, damp, reddish brown, no odor
2								Total Depth = 2' BGL
4								
6								
8								
10								
12								

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LOG OF BORING

Boring No.: SWMU 1-17
Start Date: 10/15/2012 1710
Finish Date: 10/15/2012 1740

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.458' W 108°25.827'

Total Depth: 1.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
0								Ground Surface
	0-0.5'	1730	G/2S 2M/3J		9.5 67°F		100	**Fill (Silt/Gravel (ML))** Fine grain, loose, dry, brown, no odor
	1-1.5'	1740	G/2S 2M/3J		6.7 67°F		100	**Fill (Silty Clay (CL))** Low to moderate plasticity, firm, damp, brown, no odor, refusal at 1.5' bgl in gravel
2								Total Depth = 1.5' BGL
	EB101512	1800						
4								
6								
8								
10								
12								
14								

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LOG OF BORING

Boring No.: SWMU 1-18
Start Date: 10/16/2012 0940
Finish Date: 10/16/2012 1010

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.460' W 108°25.829'

Total Depth: 1.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0								Ground Surface	0
	0-0.5'	1000	G/2S 2M/3J		8.2 61°F		100	**Fill (Silt/Gravel (ML))** Fine grain, dry, brown, no odor	
	1-1.5'	1010	G/2S 2M/3J		5.2 61°F		100	**Fill (Silty Clay (CL))** Low to moderate plasticity, firm, damp, brown, no odor, refusal at 1.5' bgl	
2								Total Depth = 1.5' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.473' W 108°25.835'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-19
Start Date: 10/16/2012 1015
Finish Date: 10/16/2012 1035

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1035	G/2S 2M/3J		4.1 65°F		100	**Fill (Silt (ML))** Fine grain, loose, dry, brown, no odor, gravel at base, refusal at 0.5' bgl	0
								Total Depth = 0.5' BGL	
2									2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 1-20
Start Date: 10/11/2012 1110
Finish Date: 10/11/2012 1300

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.479' W 108°25.842'

Total Depth: 12' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0	0-0.5' &Dup	1220	G/4S 4M/6J		21.7 74°F		60	**Silt/Silty Clay (ML/CL)** Low plasticity, loose to compact, dry, light brown, no odor
2	1.5-2'	1230	G/2S 2M/2J		4.6 74°F		60	**Silty Clay (CL)** Low plasticity, very stiff, dry, brown, no odor
4	4-6'	1245	G/2S 2M/3J		2.5 74°F		60	**Silty Clay (CL)** Similar to above, no odor
6					2.8 74°F		70	**Silty Clay (CL)** Similar to above, no odor
8					3.9 74°F		70	**Silty Clay (CL)** Similar to above, no odor, very dense at base, dry
10	10-12'	1300	G/2S 2M/3J		1.5 74°F		50	**Petrified Forest Formation - Mudstone** Very dense, dry/damp, reddish brown, no odor
12								Total Depth = 12' BGL
14								
16								
18								
20								
22								

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LOG OF BORING

Boring No.: SWMU 1-21
Start Date: 10/16/2012 1040
Finish Date: 10/16/2012 1105

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.486' W 108°25.840'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5' &Dup	1105	G/4S 4M/6J		1.4 65°F		100	Ground Surface **Silt (ML)** Fine grain, loose, dry, brown, no odor, gravel at base, refusal at 0.5' bgl Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12
14									14

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LOG OF BORING

Boring No.: SWMU 1-22
Start Date: 10/16/2012 1110
Finish Date: 10/16/2012 1145

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.494' W 108°25.843'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
0								Ground Surface
	0-0.5'	1135	G/2S 2M/3J		4.9 65°F		100	**Fill (Silt)** Low plasticity, fine grain, loose, dry, brown, no odor
	1.5-2'	1145	G/2S 2M/3J		6.8 65°F		100	**Silty Clay (CL)** Low plasticity, firm, dry to damp, brown, no odor
2								Total Depth = 2' BGL
4								
6								
8								
10								
12								

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LOG OF BORING

Boring No.: SWMU 1-23
Start Date: 10/16/2012 1150
Finish Date: 10/16/2012 1210

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.507' W 108°25.840'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5'	1210	G/2S 2M/3J		3.7 75°F		100	Ground Surface **Silt/Gravel (ML)** Very fine grain, loose, dry, brown, no odor, refusal at 0.5' bgl in gravel Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12
14									14

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LOG OF BORING

Boring No.: SWMU 1-24
Start Date: 10/8/2012 1300
Finish Date: 10/8/2012 1705

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.514' W 108°25.827'

Total Depth: 34' bgl
Ground Water: Saturated at 24' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0	0-0.5' &Dup	1605	G/4S 4M/6J		4.6 76°F		60	**Silty Clay (CL)** Low plasticity, stiff, dry, brown, gravelly, no odor
2	1.5-2'	1615	G/2S 2M/3J		6.4 76°F		60	**Silty Clay (CL)** Similar to above, firm, no odor
4					14.4 76°F		80	**Silty Clay (CL)** Low plasticity, soft, damp, reddish brown, faint odor
6					22.9 76°F		60	**Silty Clay (CL)** Similar to above, no odor
8					13.3 71°F		80	**Silty Clay (CL)** Similar to above, trace gravel, no odor
10	10.5-11.5'	1630	G/2S 2M/3J		15.7 71°F		90	**Silty Clay (CL)** Similar to above
12					11.7 71°F		60	**Clayey Sand (SC)** Medium grain, compact, damp, brown, no odor, gravelly; **Silty Clay (CL)** Low plasticity, soft, damp, reddish brown, no odor
14					17.8 71°F		90	**Silty Clay (CL)** Similar to above
16	16-18'	1640	G/2S 2M/3J		28 69°F		90	**Silty Clay (CL)** Similar to above; **Sandy Clay/Clayey Sand (CL/SC)** Very fine grain, soft, moist, brown, no odor
18					27 69°F		90	**Sandy Clay (SC)** Similar to above, moist, odor
20					27.1 69°F		90	**Clayey Silt (ML)** Low plasticity, very fine, moist, odor, black discoloration in brown
22								

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LOG OF BORING

Boring No.: SWMU 1-24
Start Date: 10/8/2012 1300
Finish Date: 10/8/2012 1705

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.514' W 108°25.827'

Total Depth: 34' bgl
Ground Water: Saturated at 24' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
				24' bgl	17.7 69°F		90	**Clayey Silt (ML)** Similar to above, odor and black discoloration more abundant than above
24	24-26'	1655	G/2S 2M/3J		19.5 68°F		90	**Clayey Silt/Sand (ML/SC)** Very fine grain, compact, soft, moist to saturated, odor, black
26					22.8 68°F		80	**Clayey Silt/Sand (ML/SC)** Similar to above, very moist, stiff and gravelly at base
28					16.7 68°F		40	**Clayey Silt (ML)** Low plasticity, very soft, moist, black, odor
30					13.2 68°F		90	**Clayey Sand/Gravel (SC)** Medium grain, compact, very dense, moist to damp, black, odor
32	32-34'	1705	G/2S 2M/3J		10.9 68°F		90	**Clayey Sand/Gravel (SC)** Very dense, damp to dry, black
34								Total Depth = 34' BGL
36								
38								
40								
42								
44								

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.521' W 108°25.826'

Total Depth: 1' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-25
Start Date: 10/16/2012 1240
Finish Date: 10/16/2012 1315

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1300	G/2S 2M/3J		4.1 77°F		100	**Fill (Sand/Gravel (SP))** Fine grain, loose, dry, brown, no odor	0
	0.5-1'	1315	G/2S 2M/3J		4.7 77°F		100	**Fill (Sand/Gravel (SP))** Similar to above, damp, no odor, refusal in gravel at 1' bgl	
2								Total Depth = 1' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14

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LOG OF BORING

Boring No.: SWMU 1-26
Start Date: 10/16/2012 1320
Finish Date: 10/16/2012 1335

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.525' W 108°25.817'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5'	1335	G/2S 2M/3J		6.5 79°F		100	Ground Surface **Fill (Silty Clay and Gravel (CL))** Low plasticity, firm, dry, brown, no odor, refusal at 0.5' bgl in gravel Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12
14									14

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.524' W 108°25.808'

Total Depth: 4' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-27
Start Date: 10/12/2012 0825
Finish Date: 10/12/2012 0915

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	0900	G/2S 2M/3J		14.5 70°F		90	**Fill (Silty Clay (CL))** Low plasticity, stiff, damp, brown, no odor	0
2	1.5-2'	0915	G/2S 2M/3J		18.2 70°F		90	**Fill (Silty Clay (CL))** Similar to above, no odor	2
4								Total Depth = 4' BGL	4
6									6
8									8
10									10
12									12
14									14
16									16
18									18
20									20
22									22

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LOG OF BORING

Boring No.: SWMU 1-28
Start Date: 10/12/2012 0920
Finish Date: 10/12/2012 1010

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.522' W 108°25.797'

Total Depth: 4' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	0950	G/2S 2M/3J		4.0 76°F		90	**Fill (Silty Clay (CL))** Low plasticity, compact to loose, dry to damp, light brown, no odor	0
2	1.5-2' &Dup	1010	G/4S 4M/6J		4.8 76°F		90	**Clayey Gravelly Sand (SC))** Loose to compact, medium grained sand, light brown, damp, no odor	2
4								Total Depth = 4' BGL	4
6									6
8									8
10									10
12									12
14									14
16									16
18									18
20									20
22									22

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LOG OF BORING

Boring No.: SWMU 1-29
Start Date: 10/16/2012 1420
Finish Date: 10/16/2012 1440

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.522' W 108°25.789'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5'	1440	G/2S 2M/3J		3.6 72°F		100	Ground Surface **Fill (Silty Clay and Gravel (CL))** Low plasticity, stiff, dry, brown, no odor, refusal at 0.5' bgl in gravel Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12
14									14

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LOG OF BORING

Boring No.: SWMU 1-30
Start Date: 10/12/2012 1020
Finish Date: 10/12/2012 1210

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.519' W 108°25.780'

Total Depth: 6' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1140	G/2S 2M/3J		4.6 70°F		80	**Fill (Silty Clay (CL))** Low plasticity, very stiff, dry to damp, brown, no odor	0
2	1.5-2'	1200	G/2S 2M/3J		6.6 70°F		90	**Fill (Silty Clay (CL))** Similar to above, damp, no odor	2
4	4-6'	1210	G/2S 2M/3J		6.7 70°F		90	**Clayey Sand (SC)** Medium grained, loose, damp, brown	4
6								Total Depth = 6' BGL	6
8									8
10									10
12									12
14									14
16									16
18									18
20									20
22									22

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.513' W 108°25.778'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-31
Start Date: 10/16/2012 1445
Finish Date: 10/16/2012 1500

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5'	1500	G/2S 2M/3J		3.9 71°F		100	Ground Surface **Fill (Silty Clay and Gravel (CL))** Low plasticity, stiff, dry, brown, no odor, refusal in gravel at 0.5' bgl Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.506' W 108°25.776'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-32
Start Date: 10/16/2012 1505
Finish Date: 10/16/2012 1540

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5' &Dup	1540	G/4S 4M/6J		0.7 71°F		100	Ground Surface **Fill (Silty Clay and Gravel (CL))** Low plasticity, stiff, dry, brown, no odor, refusal in gravel at 0.5' bgl Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 1-33
Start Date: 10/16/2012 1545
Finish Date: 10/16/2012 1603

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.496' W 108°25.775'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5'	1603	G/2S 2M/3J		3.1 70°F		100	Ground Surface **Fill (Silty Clay and Gravel (CL))** Low plasticity, stiff, dry, brown, no odor, refusal in gravel at 0.5' bgl Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.488' W 108°25.773'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Boring No.: SWMU 1-34
Start Date: 10/16/2012 1615
Finish Date: 10/16/2012 1630

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5'	1630	G/2S 2M/3J		3.2 69°F		100	Ground Surface **Fill (Silty Clay and Gravel (CL))** Low plasticity, stiff, dry, brown, no odor, refusal in gravel at 0.5' bgl Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 1-35
Start Date: 10/12/2012 1215
Finish Date: 10/12/2012 1310

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.480' W 108°25.772'

Total Depth: 6' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1245	G/2S 2M/3J		0.8 76°F		90	**Fill (Silty Clay (CL))** Low plasticity, firm, damp, brown, no odor, gravelly	0
2	1.5-2'	1300	G/2S 2M/3J		4.7 76°F		90	**Fill (Silty Clay (CL))** Similar to above	2
4	4-6'	1310	G/2S 2M/3J		1.7 76°F		90	**Silty Clay/Clayey Silt (CL/ML)** Low plasticity, soft, damp, brown, no odor	4
6								Total Depth = 6' BGL	6
8									8
10									10
12									12
14									14
16									16
18									18
20									20
22									22

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LOG OF BORING

Boring No.: SWMU 1-36
Start Date: 10/16/2012 1635
Finish Date: 10/16/2012 1700

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.472' W 108°25.770'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5'	1700	G/2S 2M/3J		1.9 69°F		100	Ground Surface **Fill (Silty Clay and Gravel (CL))** Low plasticity, stiff, dry, brown, no odor, refusal at 0.5' bgl in gravel Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12
14									14

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LOG OF BORING

Boring No.: SWMU 1-37
Start Date: 10/10/2012 1515
Finish Date: 10/10/2012 1740

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 18' bgl
Ground Water: Saturated @ 8.5' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Comments: N 35°29.444' W 108°25.816'; Temporary well (10-15' screen, 9-15' sand, 8-9' hole plug)

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0	0-0.5'	1700	G/2S 2M/3J		4.9 74°F		40	**Silty Clay (CL)** Low plasticity, stiff, dry, brown, no odor
2	1.5-2'	1715	G/2S 2M/2J		13.6 74°F		40	**Silty Clay (CL)** Low plasticity, soft, damp, reddish brown, no odor
4					12.8 74°F		90	**Silty Clay (CL)** Similar to above, no odor
6					16.6 74°F		40	**Silty Clay/Clay (CL/CH)** Similar to above, becomes a high plastic reddish brown clay, firm, damp, no odor
8	8-8.5' 8.5-9'	1730 1740	G/2S 2M/3J G/2S 2M/2J	8.5' bgl	8.8 74°F		90	**Clay (CH)** High plasticity, firm, damp, reddish brown
10				12' bgl	14.6 73°F		90	**Clayey Sand (SC)** Fine grain, compact, moist to saturated, reddish brown; **Clay (CH)** High plasticity, firm, damp, reddish brown, no odor
12	12-13' 13-14'	1755 1805	G/2S 2M/3J G/2S 2M/3J		14.6 73°F 11.4 73°F		90	**Clay (CH)** Similar to above, very stiff; **Clayey Silt/Sand (SC)** Very fine grain, loose, brown, saturated, no odor
14					12.3 73°F		90	**Clay (CH)** High plasticity, very stiff, reddish brown, no odor, damp
16	17-18'	1820	G/2S 2M/3J				90	**Clay (CH)** Similar to above; **Petrified Forest Formation - Clay/Mudstone (CH)** Similar to above, becomes very dense, dry, trace of gray, no odor
18								Total Depth = 18' BGL
20	EB101012	1845						
22								

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LOG OF BORING

Boring No.: SWMU 1-38
Start Date: 10/11/2012 1330
Finish Date: 10/11/2012 1445

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N 35°29.500' W 108°25.841'

Total Depth: 8' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0	0-0.5'	1420	G/2S 2M/3J		10.3 75°F		60	**Silt/Silty Clay (ML/CL)** Low plasticity, soft to very stiff, brown to reddish brown, damp, no odor
2	1.5-2'	1430	G/2S 2M/3J		8.5 75°F		60	**Silty Clay (CL)** Similar to above, gravelly, no odor
4					8.2 75°F		20	**Silty Clay (CL)** Similar to above, no odor, gravelly
6	6-8'	1445	G/2S 2M/3J		11.7 75°F		60	**Petrified Forest Formation - Clay/Mudstone (CH)** Very dense, dry, reddish brown and gray, no odor
8								Total Depth = 8' BGL
10	EB101112	1545						
12								
14								
16								
18								
20								
22								

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LOG OF BORING

Boring No.: SWMU 1-39
Start Date: 10/16/2012 1215
Finish Date: 10/16/2012 1235

Client: Western Refining Southwest, Inc.
Site: SWMU No. 1, Gallup Refinery
Job No.: UEC01693
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N 35°29.515' W 108°25.834'

Total Depth: 0.5' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5'	1235	G/2S 2M/3J		4.4 80°F		100	Ground Surface **Fill (Silt/Gravel (ML))** Low plasticity, very fine grain, loose, dry, brown, no odor, refusal at 0.5' bgl in gravel Total Depth = 0.5' BGL	0
2									2
4									4
6									6
8									8
10									10
12									12

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LOG OF BORING

Boring No.: SWMU 14-1
Start Date: 7/16/2012 14:30
Finish Date: 7/18/2012 13:45

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.440' W108º25.788'

Total Depth: 50' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.440' **W** 108º25.788'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1615	G/2E/2M/2J		5.0 85ºF		100	**Fill (Silt/Clay)** Damp to dry, no odor, low plastic clay, brown	0
2	1.5-2'	1620	G/2E/2M/2J		12.6 85ºF				2
					7.2 85ºF		100	**Silty Clay (CL)** Low plasticity, firm, damp, reddish brown, no odor	
4					13.9 85ºF		100	**Silty Clay (CL)** Moderate plasticity, firm to soft, damp, reddish brown, no odor	4
6					13.2 85ºF		100	**Silty Clay (CL)** Similar to above, no odor	6
8					21.0 85ºF		100	**Clay (CH)** High plasticity, soft, damp, reddish brown, no odor	8
10	10-12'	1630	G/2E/2M/2J		105.9 85ºF		100	**Clay (CH)** Similar to above, odor	10
12					12.4 85ºF		100	**Silty Clay (CL)** Moderate plasticity, firm, damp, reddish brown, trace gravel throughout - pebbles, no odor	12
14					10.9 85ºF		80	**Silty Clay (CL)** Similar to above, no odor	14
16					10.9 85ºF		80	**Silty Clay (CL)** Low to moderate plasticity, very stiff, damp, reddish brown, no odor, gravel present	16

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LOG OF BORING

Boring No.: SWMU 14-1
Start Date: 7/16/2012 14:30
Finish Date: 7/18/2012 13:45

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.440' W108º25.788'

Total Depth: 50' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.440' **W** 108º25.788'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
19					14.9 84ºF		80	**Silty Clay (CL)** Low plasticity, firm, damp to dry, reddish brown and gray, crumbly, no odor	19
21					15.8 84ºF		80	**Silty Clay (CL)** Similar to above	21
23					13.0 84ºF		90	**Silty Clay (CL)** Similar to above	23
25					13.7 84ºF		50	**Silty Clay (CL)** Similar to above	25
27					9.5 84ºF		90	**Silty Clay (CL)** Similar to above	27
29					9.6 84ºF		90	**Silty Clay (CL)** Similar to above	29
31					5.0 83ºF		80	**Silty Clay (CL)** Low plasticity, very stiff, damp to dry, reddish brown and gray, no odor	31
33					10.3 83ºF		90	**Silty Clay (CL)** Similar to above, reddish brown, no odor	33
35					9.9 83ºF		90	**Silty Clay (CL)** Similar to above, reddish brown and gray, no odor	35

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LOG OF BORING

Boring No.: SWMU 14-1
Start Date: 7/16/2012 14:30
Finish Date: 7/18/2012 13:45

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.440' W108º25.788'

Total Depth: 50' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.440' **W** 108º25.788'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
37					3.0 83ºF		50	**Sandstone/Silty Sand (SS)** Fine grain, poorly cemented, reddish brown, dry to damp, no odor	37
39					8.2 83ºF		90	**Silty Clay (CL)** Low plasticity, stiff, damp, reddish brown, no odor, gray mottling	39
41					2.1 86ºF		90	**Clay (CL)** Low plasticity, very stiff, dry to damp, reddish brown, no odor	41
43					3.1 86ºF		60	**Clay (CL)** Similar to above	43
45					4.0 86ºF		70	**Clay (CL)** Similar to above, reddish brown and gray	45
47					4.3 86ºF		70	**Clay (CL)** Similar to above	47
49	48-50'	7/18 1345	G/2E/ 2V/2J		3.2 86ºF		80	**Clay (CL)** Similar to above	49
51								Total Depth = 50' BGL	51
53									53

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WELL CONSTRUCTION

Well No.: OAPIS-1 (SWMU 14-2)
Start Date: 7/17/2012 14:30
Finish Date: 7/17/2012 17:30

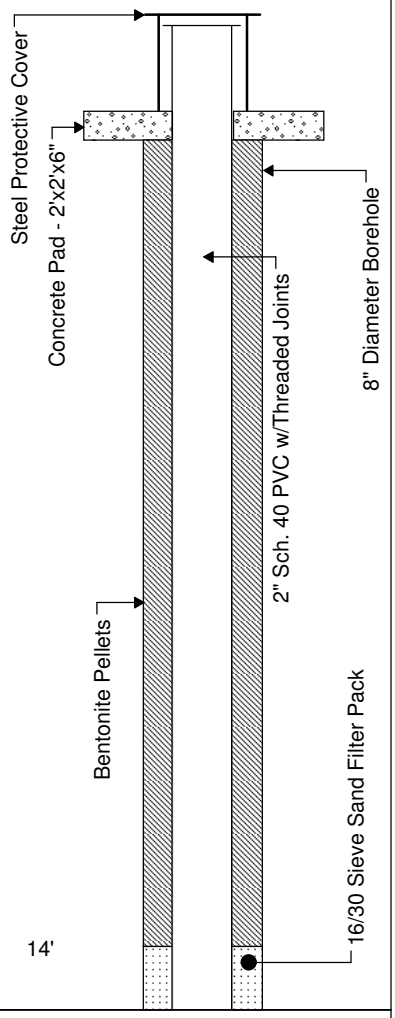
Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 26' bgl
Ground Water: Saturated @ 18' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.442' **W** 108°25.781'

Comments: N35º29.442' W108º25.781'; Samples collected 7/19/2012 (SWMU 14-2 GW 1000, FB071712 1800, EB071712 1815)

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/Container/No	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0	0-0.5'	1610	G/2E/2V/2J		2.9 83ºF		100	**Fill (Clay/Gravel)** Brown, dry to damp, no odor
2	1.5-2'	1624	G/2E/2V/2J		280 83ºF		100	**Clay (CH)** Moderate plasticity, firm, damp, black and brown, odor
					56.8 83ºF		90	**Silty Clay (CL)** Low plasticity, firm, damp, brown grading to black at 4' bgl, faint odor
4					69.4 83ºF		90	**Silty Clay (CL)** Similar to above, brown and black, trace sand, odor
6					87.5 83ºF		90	**Silty Clay (CL)** Similar to above, odor
8	8-10' &Dup	1645	G/4E/4V/4J		330 83ºF		90	**Silty Clay (CL)** Low plasticity, very soft, damp, dark brown and black, odor
10					294 83ºF		80	**Silty Clay (CL)** Similar to above
12							70	**Silty Clay (CL)** Similar to above, faint odor
					14.6 83ºF		70	**Clay (CH)** Moderate plasticity, stiff, damp, reddish brown, no odor
14								

Completion Results



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WELL CONSTRUCTION

Well No.: OAPIS-1 (SWMU 14-2)
Start Date: 7/17/2012 14:30
Finish Date: 7/17/2012 17:30

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

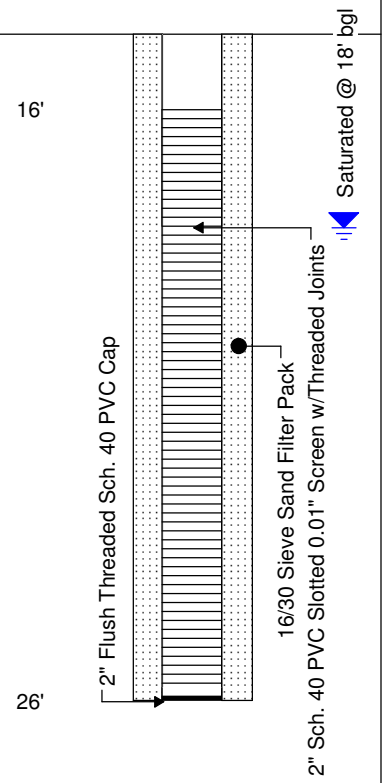
Total Depth: 26' bgl
Ground Water: Saturated @ 18' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.442' **W** 108°25.781'

Comments: N35º29.442' W108º25.781'; Samples collected 7/19/2012 (SWMU 14-2 GW 1000, FB071712 1800, EB071712 1815)

Depth (ft.)	Sample Depth	Time	Sample Type/Container/No	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
					5.7 86ºF		90	**Clay (CH)** Similar to above, no odor
16	16-18'	1710	G/2E/2V/2J	18'	10.7 86ºF		80	**Clay (CH)** Similar to above, no odor
18					-- --		90	**Clay (CH)** Similar to above, water in split spoon
20					17.9 83ºF		80	**Clay (CH)** Similar to above
22					12.8 83ºF		90	**Clay (CH)** Similar to above, gray and reddish brown, no odor
24	24-25'	1730	G/2E/2V/2J		13.2 83ºF		70	**Clay (CH)** Similar to above
26							-	**Clay (CH)** Similar to above
28								
30								
32								

Total Depth = 26' BGL

Completion Results



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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.444' W108º25.779'

Total Depth: 26' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.444' **W** 108º25.779'

Boring No.: SWMU 14-3
Start Date: 7/18/2012 08:40
Finish Date: 7/18/2012 12:45

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0	0-0.5'	1125	G/2E/2V/2J		14.3 83ºF		90	**Fill (Silt/Clay/Gravel)** Damp to dry, brown, no odor
	1.5-2'	1200	G/2E/2V/2J		6.2 83ºF			
2					101 83ºF		70	**Silty Clay (CL)** Low plasticity, firm, damp, brown, odor, black discoloration, gravelly
4					122 83ºF		80	**Silty Clay (CL)** Similar to above, odor, soft
6					104 83ºF		70	**Silty Clay (CL)** Similar to above, odor
8	8-10'	1215	G/2E/2V/2J		343 83ºF		80	**Silty Clay (CL)** Similar to above, strong odor
10					155 83ºF		70	**Silty Clay (CL)** Similar to above, odor
12	12-14'	1230	G/2E/2V/2J	14'	326 83ºF		80	**Silty Clay (CL)** Similar to above, odor
14					-- --		90	**Clay (CH)** Moderate plasticity, firm, saturated - water in spoon, reddish brown, gravelly at top, odor
16					-- --		--	**Clay (CH)** Similar to above, damp

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LOG OF BORING

Boring No.: SWMU 14-3
Start Date: 7/18/2012 08:40
Finish Date: 7/18/2012 12:45

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.444' W108º25.779'

Total Depth: 26' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.444' **W** 108º25.779'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
19					-- --		--	**Clay (CH)** Similar to above	19
21					8.5 83ºF		80	**Clay (CH)** High plasticity, very stiff, damp, reddish brown, no odor	21
23					5.4 83ºF		90	**Clay (CH)** Similar to above, reddish brown and gray, no odor	23
25	25.5-26'	1245	G/2E/2V/2J		2.3 83ºF		90	**Silty Clay (CL)** Low plasticity, firm, damp, brown, no odor	25
								Total Depth = 26' BGL	
27									27
29									29
31									31
33									33
35									35

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LOG OF BORING

Boring No.: SWMU 14-4
Start Date: 7/17/2012 12:30
Finish Date: 7/17/2012 14:15

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.439' W108º25.782'

Total Depth: 20' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.439' **W** 108º25.782'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1318	G/2E/2V/2J		5.9 87ºF		90	**Fill (Gravel/Clay)** Damp, brown, no odor	0
2	1.5-2'	1330	G/2E/2V/2J		6.2 87ºF				2
					28.2 87ºF		90	**Silty Clay (CL)** Low plasticity, firm to soft, damp, brown, no odor	
4									4
					23.1 87ºF		90	**Silty Clay (CL)** Similar to above, no odor	
6									6
					19.2 87ºF		90	**Silty Clay (CL)** Similar to above, odor	
8									8
					581 87ºF		90	**Silty Clay (CL)** Moderate plasticity, soft, damp, brown and black, odor	
10	10-12'	1400	G/2E/2V/2J		711 87ºF		90	**Silty Clay (CL)** Similar to above, odor, brown	10
12					34.5 87ºF		90	**Silty Clay (CL)** Similar to above, faint odor, gravel present	12
14					8.7 84ºF		100	**Clay (CH)** Moderate plasticity, stiff, damp, reddish brown, no odor	14
16					6.5 84ºF		90	**Clay (CH)** Similar to above, very stiff, no odor	16

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.439' W108º25.782'

Total Depth: 20' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.439' **W** 108º25.782'

Boring No.: SWMU 14-4
Start Date: 7/17/2012 12:30
Finish Date: 7/17/2012 14:15

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
19	19.5-20'	1415	G/2E/2V/2J		2.5 84ºF		90	**Clay (CH)** Similar to above, no odor	19
								Total Depth = 20' BGL	
21									21
23									23
25									25
27									27
29									29
31									31
33									33
35									35

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.441' W108º25.776'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.441' **W** 108º25.776'

Boring No.: SWMU 14-5
Start Date: 7/19/2012 14:25
Finish Date: 7/19/2012 15:15

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5' &Dup	1500	G/4E/4V/4J		5.7 80ºF		100	**Fill (Gravel/Clay)** Damp, reddish brown, no odor	0
2	1.5-2'	1506	G/2E/2V/2J		7.4 80ºF				2
								Total Depth = 2' BGL	
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.436' W108º25.781'

Total Depth: 18' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **W**

Boring No.: SWMU 14-6
Start Date: 10/9/2012 1200
Finish Date: 10/9/2012 1415

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1335	G/2S 2M/3J		0.7 69ºF		90	**Silty Clay (CL)** Low plasticity, stiff, dry to damp, brown, no odor	0
2	1.5-2'	1345	G/2S 2M/3J		3.9 69ºF		80	**Silty Clay (CL)** Similar to above, no odor	2
4					306 69ºF		70	**Silty Clay (CL)** Low plasticity, soft, damp, brown, odor, black staining	4
6					364 69ºF		70	**Silty Clay (CL)** Similar to above, odor	6
8					345 69ºF		80	**Clay (CH)** High plasticity, firm, damp, brown, odor	8
10	10-12'	1355	G 2M/3J		367 69ºF		80	**Clay (CH)** Similar to above, odor	10
12					13.6 69ºF		70	**Clay (CH)** Similar to above, dry, crumbly, odor, less intense to almost faint	12
14					10.5 69ºF		30	**Clay (CH)** High plasticity, very stiff/dense, dry to damp, no odor	14
16	17-18'	1410	G/2S 2M/3J		4.6 70ºF		60	**Clay (CH)** High plasticity, very stiff/dense, dry to damp, no odor, reddish brown	16
18								Total Depth = 18' BGL	18

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LOG OF BORING

Boring No.: SWMU 14-7
Start Date: 7/18/2012 17:25
Finish Date: 7/18/2012 19:20

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.437' W108º25.778'

Total Depth: 24' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.437' **W** 108º25.778'

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1830	G/2E/2V/2J		141 81ºF		90	**Fill (Gravel/Clay)** Brown, damp, faint odor	0
2	1.5-2'	1850	G/2E/2V/2J		197 81ºF				2
					293 81ºF		90	**Silty Clay (CL)** Low plasticity, firm, damp, brown, odor, gravelly	
4					365 81ºF		90	**Silty Clay (CL)** Similar to above, strong odor	4
6	6-8'	1910	G/2E/2V/2J		935 81ºF		90	**Clay (CH)** High plasticity, stiff, damp, reddish brown, odor	6
8					649 84ºF		90	**Clay (CH)** Similar to above, dry, crumbly, calcareous, odor	8
10					-- --		--	**Clay (CH)** Similar to above, no recovery	10
12					265 84ºF		90	**Clay (CH/CL)** Similar to above, becomes gray and sandy at base, odor	12
14					108 84ºF		90	**Clay (CH)** High plasticity, very stiff, dry, brown with greenish gray sand in seams, odor	14
16					74 86ºF		60	**Clayey Sand (SC)** Fine grain, loose, damp, greenish gray, odor	16

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LOG OF BORING

Boring No.: SWMU 14-7
Start Date: 7/18/2012 17:25
Finish Date: 7/18/2012 19:20

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.437' W108º25.778'

Total Depth: 24' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.437' **W** 108º25.778'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
19					9.9 87ºF		70	**Clayey Sand/Sandy Clay (SC/CL)** Similar to above, trace CH reddish brown clay at base, no odor	19
21					3.2 87ºF		95	**Clay (CH)** High plasticity, very stiff, dry to damp, reddish brown, no odor	21
23	23.5-24'	1920	G/2E/2V/2J		3.3 87ºF		80	**Clay (CH)** Similar to above	23
								Total Depth = 24' BGL	
25									25
27									27
29									29
31									31
33									33
35									35

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.445' W108º25.766'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.445' **W** 108º25.766'

Boring No.: SWMU 14-8
Start Date: 7/19/2012 11:15
Finish Date: 7/19/2012 11:45

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1127	G/2E/2V/2J		8.2 82ºF		100	**Fill (Gravel/Clay/Sand)** Dry to damp, brown to black, odor	0
2	1.5-2' &Dup	1140	G/4E/4V/4J		3717 82ºF			Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-9
Start Date: 7/18/2012 14:00
Finish Date: 7/18/2012 17:15

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.446' W108º25.757'

Total Depth: 14' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.446' **W** 108º25.757'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
								Ground Surface
0	0-0.5' &Dup	1620	G/4E/ 4V/2J		4.9 74ºF		100	**Fill (Silt/Gravel)** Loose, dry, brown
2	1.5-2'	1630	G/2E/ 2V/2J		106 74ºF		90	**Fill (Clay)** Low plasticity, soft, damp, brown, odor
					1712 74ºF		70	**Fill (Clay)** Similar to above, strong odor, damp
4	4-6'	1640	G/2E/ 2V/2J		1959 74ºF		90	**Sandy Clay (CL)** Moderate to low plasticity, firm to soft, dark brown, damp, strong odor
6					582 74ºF		90	**Sandy Clay (CL)** Similar to above, odor
8					10.9 74ºF		90	**Silty Clay (CL)** Low to moderate plasticity, firm, damp, brown, no odor
10					11.3 74ºF		90	**Clay (CH)** High plasticity, stiff, damp, brown, no odor
12							90	**Clay (CH)** Similar to above, no odor
14	13-14'	1700	G/2E/ 2V/2J		10.8 74ºF		90	**Silty Clay (CL)** Low plasticity, stiff, damp, brown, no odor
								Total Depth = 14' BGL
16								

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LOG OF BORING

Boring No.: SWMU 14-10
Start Date: 7/19/2012 10:20
Finish Date: 7/19/2012 11:10

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.443' W108º25.772'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.443' **W** 108º25.772'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0								Ground Surface	0
	0-0.5'	1100	G/2E/2V/2J		0.3 80ºF		100	**Fill (Gravel/Clay)** Dry, brown, no odor	
2	1.5-2'	1105	G/2E/2V/2J		0.4 80ºF			Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.447' W108º25.755'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.447' **W** 108º25.755'

Boring No.: SWMU 14-11
Start Date: 7/19/2012 13:20
Finish Date: 7/19/2012 13:55

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1333	G/2E/2V/2J		5.3 80ºF		100	**Fill (Gravel/Clay)** Damp, brown, no odor	0
2	1.5-2'	1338	G/2E/2V/2J		38.5 80ºF			Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.441' W108º25.768'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.441' **W** 108º25.768'

Boring No.: SWMU 14-12
Start Date: 7/19/2012 12:00
Finish Date: 7/19/2012 12:20

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1205	G/2E/2V/2J		949 84ºF		100	**Clay (CH)** High plasticity, soft, damp, brown to black, strong odor	0
2	1.5-2'	1212	G/2E/2V/2J		1094 84ºF			Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-13
Start Date: 7/19/2012 12:20
Finish Date: 7/19/2012 12:50

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.442' W108º25.762'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.442' **W** 108º25.762'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1236	G/2E/2V/2J		300 87ºF		100	**Clay (CH)** High plasticity, soft, damp, dark brown to black, odor, sand lense from 0.75 to 1.25' bgl	0
	1.5-2'	1245	G/2E/2V/2J		975 87ºF				
2								Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-14
Start Date: 7/19/2012 12:55
Finish Date: 7/19/2012 13:20

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.444' W108º25.757'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.444' **W** 108º25.757'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description
0								Ground Surface
	0-0.5'	1307	G/2E/2V/2J		567 80ºF		100	**Clay (CL)** Low plasticity, soft, damp, dark brown, odor
	1.5-2'	1312	G/2E/2V/2J		1028 80ºF		100	**Clayey Sand (SC)** Fine grain, compact, damp, black, odor
2								Total Depth = 2' BGL
4								
6								
8								
10								
12								
14								
16								

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.438' W108º25.767'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.438' **W** 108º25.767'

Boring No.: SWMU 14-15
Start Date: 7/19/2012 17:00
Finish Date: 7/19/2012 17:20

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1714	G/2E/2V/1J		2.8 84ºF		100	**Fill (Gravel/Sand)** Red sand, damp, no odor	0
	1.5-2'	1719	G/2E/2V/1J		5000 84ºF		100	**Clayey Sand (SC)** Fine grain, compact, damp, gray to black, strong odor	
2								Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-16
Start Date: 7/19/2012 16:30
Finish Date: 7/19/2012 17:00

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.442' W108º25.763'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.442' **W** 108º25.763'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0								Ground Surface	0
	0-0.5'	1645	G/2E/2V/1J		10.8 86ºF		100	**Fill (Silt/Sand)** Very fine grain, loose, damp, brown	
	1.5-2'	1651	G/2E/2V/1J		375.5 86ºF		100	**Clay (CH)** High plasticity, soft, damp, brown and black, odor	
2								Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-17
Start Date: 7/19/2012 15:45
Finish Date: 7/19/2012 16:30

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.442' W108º25.756'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.442' **W** 108º25.756'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0								Ground Surface	0
	0-0.5'	1611	G/2E/2V/1J		10.9 86ºF		100	**Fill (Clay/Silt)** Damp, brown, no odor	
	1.5-2'	1618	G/2E/2V/1J		898 86ºF		100	**Clay (CH)** High plasticity, soft, damp, brown to black, odor, oily	
2								Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-18
Start Date: 7/19/2012 13:55
Finish Date: 7/19/2012 14:25

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.445' W108º25.751'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.445' **W** 108º25.751'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1408	G/2E/2V/2J		5.0 80ºF		100	**Fill (Silt/Sand/Gravel)** Damp, brown, no odor	0
2	1.5-2'	1415	G/2E/2V/2J		2537 80ºF		100	**Clayey Sand** Fine grain sand, compact, damp, black, strong odor	2
								Total Depth = 2' BGL	
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-19
Start Date: 7/19/2012 15:15
Finish Date: 7/19/2012 15:45

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.445' W108º25.744'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.445' **W** 108º25.744'

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1526	G/2E/2V/2J		4.4 86ºF		100	**Fill (Silt/Sand Clay)** Damp, reddish brown, no odor	0
2	1.5-2'	1533	G/2E/2V/2J		5.1 86ºF			Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-20
Start Date: 7/19/2012 17:20
Finish Date: 7/19/2012 17:55

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket

Total Depth: 1' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N 35º29.436' **W** 108°25.739'

Comments: N35º29.436' W108º25.739'; Blank samples collected 7/19/2012 (FB071912 @1800, EB071912 @1815)

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
0	0-0.5' &Dup	1750	G/4E/ 4V/2J		2.0 84ºF		100	Ground Surface **Fill (Gravel/Sand)** Compacted, very dense, dry, brown, no odor Total Depth = 1' BGL Refusal at 1' bgl, no sample	0
2									2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.431' W108º25.765'

Total Depth: 10' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **W**

Boring No.: SWMU 14-21
Start Date: 10/9/2012 1445
Finish Date: 10/9/2012 1600

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1535	G/2S 2M/3J		10.5 71ºF		40	**Silty Clay (CL)** Low plasticity, stiff, dry to damp, brown, no odor	0
2	1.5-2'	1545	G/2S 2M/3J		4.6 71ºF		40	**Silty Clay (CL)** Similar to above	2
4					8.6 71ºF		90	**Silty Clay (CL)** Low plasticity, soft, damp, brown, no odor	4
6					7.6 71ºF		90	**Silty Clay (CL)** Similar to above	6
8	8-10'	1600	G/2S 2M/3J		4.5 71ºF		90	**Silty Clay (CL)** Similar to above	8
10								Total Depth = 10' BGL	10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-22
Start Date: 10/9/2012 1610
Finish Date: 10/9/2012 1730

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon
Comments: N35º29.432' W108º25.758'

Total Depth: 10' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **W**

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1645	G/2S 2M/3J		2.9 70ºF		70	**Silty Clay (CL)** Low plasticity, stiff, dry, brown, no odor	0
2	1.5-2'	1655	G/2S 2M/3J		7.3 70ºF		40	**Silty Clay (CL)** Similar to above	2
4	4-6' &Dup	1720	G/4S 4M/6J		7.9 70ºF		90	**Silty Clay (CL)** Low plasticity, soft, damp, brown, no odor	4
6					7.3 70ºF		80	**Silty Clay (CL)** Similar to above	6
8	8-10'	1730	G/2S 2M/3J		4.9 70ºF		90	**Silty Clay (CL)** Moderate plasticity, very soft, damp, reddish brown, no odor	8
10								Total Depth = 10' BGL	10
12									12
14									14
16									16

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LOG OF BORING

Boring No.: SWMU 14-23
Start Date: 10/10/2012 1145
Finish Date: 10/10/2012 1415

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 22' bgl
Ground Water: Saturated @ 16' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **W**

Comments: N35º29.449' W108º25.749'; Temporary well set from 15-20' bgl

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1345	G/2S 2M/3J		11 77ºF		70	**Fill (Silty Clay (CL))** Low plasticity, stiff, dry, brown, no odor	0
2	1.5-2'	1355	G/2S 2M/3J		14.8 77ºF		70	**Fill (Silty Clay (CL))** Similar to above	2
4					13.6 77ºF		90	**Fill (Silty Clay (CL))** Similar to above	4
6					385 77ºF		90	**Clayey Silt/Sand (SC)** Fine grain, loose, damp, brown, odor	6
8					112 77ºF		60	**Silty Clay (CL)** Moderate plasticity, soft, damp, odor, brown	8
10					315 76ºF		90	**Silty Clay (CH)** High plasticity, soft, damp, brown, odor	10
12	12-14'	1405	G/ 2M/3J		398 76ºF		90	**Silty Clay (CH)** Similar to above, odor	12
14	14-16'	1415	G/2S 2M/3J	16'	52 76ºF		90	**Clay (CH)** Similar to above, odor	14
16					120 75ºF		50	**Sandy Clay (CL)** Moderate plasticity, very dense, damp, brown, odor, water in spoon, soupy	16

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LOG OF BORING

Boring No.: SWMU 14-23
Start Date: 10/10/2012 1145
Finish Date: 10/10/2012 1415

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow-Stem Auger
Sampling Method: Split Spoon

Total Depth: 22' bgl
Ground Water: Saturated @ 16' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **W**

Comments: N35º29.449' W108º25.749'; Temporary well set from 15-20' bgl

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
19							--	No Recovery	19
21							--	No Recovery	21
23								Total Depth = 22' BGL	23
25									25
27									27
29									29
31									31
33									33
35									35

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LOG OF BORING

Client: Western Refining Southwest, Inc.
Site: SWMU No. 14 - Gallup Refinery
Job No.: UEC01655
Geologist: Tracy Payne
Driller: --
Drilling Rig: --
Drilling Method: Hand Auger
Sampling Method: Auger Bucket
Comments: N35º29.438' W108º25.751'

Total Depth: 2' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **W**

Boring No.: SWMU 14-24
Start Date: 10/17/2012 0940
Finish Date: 10/17/2012 1030

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0	0-0.5'	1015	G/2S 2M/3J		3.0 60ºF		100	**Silty Clay (CL)** Low plasticity, firm, dry to damp, brown, no odor	0
2	1.5-2'	1030	G/2S 2M/3J		4.0 60ºF			Total Depth = 2' BGL	2
4									4
6									6
8									8
10									10
12									12
14									14
16									16

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Appendix E

Analytical Data Reports

SWMU 1 SOILS

METALS J-FLAGGED RESULTS

Analytical Report
Lab Order: **1210279**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-001C

Client Sample ID: SWMU 1-2 (6-8')
Collection Date: 10/2/2012 10:00:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Barium	39	0.12	0.20		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Beryllium	0.61	0.019	0.30		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Chromium	8.1	0.24	0.60		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Cobalt	3.9	0.14	0.60		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Iron	12000	370	500		mg/Kg	500	10/17/2012 12:52:55 PM	4300
Lead	3.5	0.44	0.50		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Manganese	230	0.11	0.50		mg/Kg	5	10/17/2012 12:50:30 PM	4300
Nickel	6.0	0.33	1.0		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 6:37:37 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Vanadium	16	0.11	5.0		mg/Kg	2	10/17/2012 10:26:45 AM	4300
Zinc	16	2.0	5.0		mg/Kg	2	10/17/2012 10:26:45 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-002C

Client Sample ID: SWMU 1-2 (10-11')
Collection Date: 10/2/2012 10:20:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Barium	220	0.30	0.50		mg/Kg	5	10/17/2012 12:55:32 PM	4300
Beryllium	0.74	0.019	0.30		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Chromium	6.0	0.24	0.60		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Cobalt	3.3	0.14	0.60		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Iron	11000	370	500		mg/Kg	500	10/17/2012 12:59:38 PM	4300
Lead	3.9	0.44	0.50		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Manganese	310	0.21	1.0		mg/Kg	10	10/23/2012 6:42:27 PM	4300
Nickel	5.6	0.33	1.0		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 6:40:01 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Vanadium	12	0.11	5.0		mg/Kg	2	10/17/2012 10:31:47 AM	4300
Zinc	13	2.0	5.0		mg/Kg	2	10/17/2012 10:31:47 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-003C

Client Sample ID: SWMU 1-2 (14-16')
Collection Date: 10/2/2012 10:35:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Barium	680	1.2	2.0		mg/Kg	20	10/23/2012 6:47:15 PM	4300
Beryllium	0.58	0.019	0.30		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Chromium	6.3	0.24	0.60		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Cobalt	3.5	0.14	0.60		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Iron	12000	370	500		mg/Kg	500	10/17/2012 1:04:52 PM	4300
Lead	3.5	0.44	0.50		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Manganese	360	0.21	1.0		mg/Kg	10	10/17/2012 1:02:29 PM	4300
Nickel	5.7	0.33	1.0		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 6:44:52 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Vanadium	13	0.11	5.0		mg/Kg	2	10/17/2012 10:36:49 AM	4300
Zinc	13	2.0	5.0		mg/Kg	2	10/17/2012 10:36:49 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-004C

Client Sample ID: SWMU 1-2 (17-17.25')
Collection Date: 10/2/2012 10:50:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 6:49:38 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Barium	180	0.30	0.50		mg/Kg	5	10/17/2012 1:07:31 PM	4300
Beryllium	0.74	0.019	0.30		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Chromium	6.9	0.24	0.60		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Cobalt	3.8	0.14	0.60		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Iron	12000	370	500		mg/Kg	500	10/17/2012 1:09:55 PM	4300
Lead	4.8	0.44	0.50		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Manganese	280	0.21	1.0		mg/Kg	10	10/23/2012 6:52:01 PM	4300
Nickel	6.7	0.33	1.0		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 6:49:38 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Vanadium	12	0.11	5.0		mg/Kg	2	10/17/2012 10:54:32 AM	4300
Zinc	13	2.0	5.0		mg/Kg	2	10/17/2012 10:54:32 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-005C

Client Sample ID: SWMU 1-2 (19.5-20')
Collection Date: 10/2/2012 11:05:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 7:01:34 PM	4300
Arsenic	3.1	1.3	5.0	J	mg/Kg	2	10/17/2012 10:59:42 AM	4300
Barium	1300	3.0	5.0		mg/Kg	50	10/17/2012 1:23:06 PM	4300
Beryllium	0.77	0.019	0.30		mg/Kg	2	10/17/2012 10:59:42 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 10:59:42 AM	4300
Chromium	12	0.24	0.60		mg/Kg	2	10/17/2012 10:59:42 AM	4300
Cobalt	11	0.14	0.60		mg/Kg	2	10/17/2012 10:59:42 AM	4300
Iron	17000	370	500		mg/Kg	500	10/17/2012 1:25:32 PM	4300
Lead	3.9	0.44	0.50		mg/Kg	2	10/17/2012 10:59:42 AM	4300
Manganese	1200	1.1	5.0		mg/Kg	50	10/17/2012 1:23:06 PM	4300
Nickel	16	0.33	1.0		mg/Kg	2	10/17/2012 10:59:42 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 7:01:34 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 10:59:42 AM	4300
Vanadium	14	0.11	5.0		mg/Kg	2	10/17/2012 10:59:42 AM	4300
Zinc	30	2.0	5.0		mg/Kg	2	10/17/2012 10:59:42 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-008C

Client Sample ID: SWMU 1-3 (2-4')
Collection Date: 10/2/2012 4:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	0.63	2.5		mg/Kg	1	10/23/2012 7:04:15 PM	4300
Arsenic	ND	13	50		mg/Kg	20	10/17/2012 1:28:13 PM	4300
Barium	770	1.2	2.0		mg/Kg	20	10/17/2012 1:28:13 PM	4300
Beryllium	0.39	0.0093	0.15		mg/Kg	1	10/17/2012 11:02:17 AM	4300
Cadmium	ND	0.027	0.10		mg/Kg	1	10/17/2012 11:02:17 AM	4300
Chromium	3.8	0.12	0.30		mg/Kg	1	10/17/2012 11:02:17 AM	4300
Cobalt	2.4	0.069	0.30		mg/Kg	1	10/17/2012 11:02:17 AM	4300
Iron	4800	150	200		mg/Kg	200	10/23/2012 7:09:43 PM	4300
Lead	ND	0.22	0.25		mg/Kg	1	10/17/2012 11:02:17 AM	4300
Manganese	340	0.42	2.0		mg/Kg	20	10/17/2012 1:28:13 PM	4300
Nickel	3.8	0.17	0.50		mg/Kg	1	10/17/2012 11:02:17 AM	4300
Selenium	ND	1.4	2.5		mg/Kg	1	10/23/2012 7:04:15 PM	4300
Silver	ND	0.035	0.25		mg/Kg	1	10/17/2012 11:02:17 AM	4300
Vanadium	11	0.056	2.5		mg/Kg	1	10/17/2012 11:02:17 AM	4300
Zinc	9.1	1.0	2.5		mg/Kg	1	10/17/2012 11:02:17 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-009C

Client Sample ID: SWMU 1-3 (10-11')
Collection Date: 10/2/2012 4:35:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 7:12:19 PM	4300
Arsenic	2.1	1.3	5.0	J	mg/Kg	2	10/17/2012 11:09:52 AM	4300
Barium	220	0.30	0.50		mg/Kg	5	10/17/2012 1:34:59 PM	4300
Beryllium	0.72	0.019	0.30		mg/Kg	2	10/17/2012 11:09:52 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 11:09:52 AM	4300
Chromium	7.6	0.24	0.60		mg/Kg	2	10/17/2012 11:09:52 AM	4300
Cobalt	3.6	0.14	0.60		mg/Kg	2	10/17/2012 11:09:52 AM	4300
Iron	11000	370	500		mg/Kg	500	10/17/2012 1:37:26 PM	4300
Lead	3.4	0.44	0.50		mg/Kg	2	10/17/2012 11:09:52 AM	4300
Manganese	420	0.21	1.0		mg/Kg	10	10/23/2012 7:14:46 PM	4300
Nickel	5.7	0.33	1.0		mg/Kg	2	10/17/2012 11:09:52 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 7:12:19 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 11:09:52 AM	4300
Vanadium	15	0.11	5.0		mg/Kg	2	10/17/2012 11:09:52 AM	4300
Zinc	11	2.0	5.0		mg/Kg	2	10/17/2012 11:09:52 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-010C

Client Sample ID: SWMU 1-3 (11-11.25')
Collection Date: 10/2/2012 4:50:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 7:17:10 PM	4300
Arsenic	1.9	1.3	5.0	J	mg/Kg	2	10/17/2012 11:16:34 AM	4300
Barium	110	0.30	0.50		mg/Kg	5	10/17/2012 1:40:18 PM	4300
Beryllium	0.63	0.019	0.30		mg/Kg	2	10/17/2012 11:16:34 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 11:16:34 AM	4300
Chromium	4.8	0.24	0.60		mg/Kg	2	10/17/2012 11:16:34 AM	4300
Cobalt	3.2	0.14	0.60		mg/Kg	2	10/17/2012 11:16:34 AM	4300
Iron	10000	370	500		mg/Kg	500	10/17/2012 1:42:41 PM	4300
Lead	4.0	0.44	0.50		mg/Kg	2	10/17/2012 11:16:34 AM	4300
Manganese	380	0.21	1.0		mg/Kg	10	10/23/2012 7:19:37 PM	4300
Nickel	5.0	0.33	1.0		mg/Kg	2	10/17/2012 11:16:34 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 7:17:10 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 11:16:34 AM	4300
Vanadium	10	0.11	5.0		mg/Kg	2	10/17/2012 11:16:34 AM	4300
Zinc	10	2.0	5.0		mg/Kg	2	10/17/2012 11:16:34 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-011C

Client Sample ID: SWMU 1-3 (18.5-19.5')
Collection Date: 10/2/2012 5:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 7:22:03 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Barium	270	0.61	1.0		mg/Kg	10	10/17/2012 1:45:34 PM	4300
Beryllium	0.79	0.019	0.30		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Chromium	9.3	0.24	0.60		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Cobalt	5.4	0.14	0.60		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Iron	16000	370	500		mg/Kg	500	10/17/2012 1:48:00 PM	4300
Lead	4.8	0.44	0.50		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Manganese	510	0.42	2.0		mg/Kg	20	10/23/2012 7:24:33 PM	4300
Nickel	10	0.33	1.0		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 7:22:03 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Vanadium	11	0.11	5.0		mg/Kg	2	10/17/2012 11:32:55 AM	4300
Zinc	15	2.0	5.0		mg/Kg	2	10/17/2012 11:32:55 AM	4300

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210279-012C

Client Sample ID: SWMU 1-3 (19.5-20')
Collection Date: 10/2/2012 5:25:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 7:26:58 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Barium	400	0.61	1.0		mg/Kg	10	10/17/2012 2:00:57 PM	4300
Beryllium	0.83	0.019	0.30		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Chromium	10	0.24	0.60		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Cobalt	5.7	0.14	0.60		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Iron	16000	370	500		mg/Kg	500	10/17/2012 2:05:01 PM	4300
Lead	2.8	0.44	0.50		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Manganese	610	0.42	2.0		mg/Kg	20	10/23/2012 7:36:44 PM	4300
Nickel	12	0.33	1.0		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 7:26:58 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Vanadium	10	0.11	5.0		mg/Kg	2	10/17/2012 11:38:08 AM	4300
Zinc	16	2.0	5.0		mg/Kg	2	10/17/2012 11:38:08 AM	4300

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

Qualifiers:

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

Analytical Report
Lab Order: **1210332**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-001B

Client Sample ID: SWMU 1-4 (10-12')DUP
Collection Date: 10/3/2012 1:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Barium	870	3.0	5.0		mg/Kg	50	10/11/2012 11:42:40 AM	4190
Beryllium	0.49	0.046	0.75	J	mg/Kg	5	10/11/2012 9:55:44 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Chromium	6.4	0.59	1.5		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Cobalt	3.1	0.34	1.5		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Iron	9200	370	500		mg/Kg	500	10/11/2012 11:45:05 AM	4190
Lead	4.4	1.1	1.2		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Manganese	1400	1.1	5.0		mg/Kg	50	10/11/2012 11:42:40 AM	4190
Nickel	5.0	0.83	2.5		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Vanadium	19	0.28	12		mg/Kg	5	10/11/2012 9:55:44 AM	4190
Zinc	10	5.0	12	J	mg/Kg	5	10/11/2012 9:55:44 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-002C

Client Sample ID: SWMU 1-4 (17-18')
Collection Date: 10/3/2012 1:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Barium	370	3.0	5.0		mg/Kg	50	10/11/2012 11:48:01 AM	4190
Beryllium	0.57	0.046	0.75	J	mg/Kg	5	10/11/2012 10:00:49 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Chromium	7.9	0.59	1.5		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Cobalt	3.9	0.34	1.5		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Iron	10000	370	500		mg/Kg	500	10/11/2012 11:50:28 AM	4190
Lead	2.7	1.1	1.2		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Manganese	570	1.1	5.0		mg/Kg	50	10/11/2012 11:48:01 AM	4190
Nickel	6.0	0.83	2.5		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Vanadium	17	0.28	12		mg/Kg	5	10/11/2012 10:00:49 AM	4190
Zinc	17	5.0	12		mg/Kg	5	10/11/2012 10:00:49 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-003C

Client Sample ID: SWMU 1-4 (23-24')
Collection Date: 10/3/2012 2:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Barium	200	0.30	0.50		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Beryllium	1.1	0.046	0.75		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Chromium	14	0.59	1.5		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Cobalt	5.9	0.34	1.5		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Iron	18000	370	500		mg/Kg	500	10/11/2012 12:08:30 PM	4190
Lead	2.1	1.1	1.2		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Manganese	340	0.21	1.0		mg/Kg	10	10/11/2012 12:06:07 PM	4190
Nickel	12	0.83	2.5		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Vanadium	15	0.28	12		mg/Kg	5	10/11/2012 10:16:19 AM	4190
Zinc	26	5.0	12		mg/Kg	5	10/11/2012 10:16:19 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-006C

Client Sample ID: SWMU 1-4 (8-10')
Collection Date: 10/3/2012 1:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Barium	590	3.0	5.0		mg/Kg	50	10/11/2012 12:11:09 PM	4190
Beryllium	0.72	0.046	0.75	J	mg/Kg	5	10/11/2012 10:21:28 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Chromium	7.9	0.59	1.5		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Cobalt	4.0	0.34	1.5		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Iron	11000	370	500		mg/Kg	500	10/11/2012 12:13:37 PM	4190
Lead	4.2	1.1	1.2		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Manganese	720	1.1	5.0		mg/Kg	50	10/11/2012 12:11:09 PM	4190
Nickel	6.3	0.83	2.5		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Vanadium	16	0.28	12		mg/Kg	5	10/11/2012 10:21:28 AM	4190
Zinc	16	5.0	12		mg/Kg	5	10/11/2012 10:21:28 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-007B

Client Sample ID: SWMU 1-4 (10-12')
Collection Date: 10/3/2012 1:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Barium	360	3.0	5.0		mg/Kg	50	10/11/2012 12:16:30 PM	4190
Beryllium	0.34	0.046	0.75	J	mg/Kg	5	10/11/2012 10:26:23 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Chromium	3.7	0.59	1.5		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Cobalt	2.0	0.34	1.5		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Iron	5300	370	500		mg/Kg	500	10/11/2012 12:18:56 PM	4190
Lead	3.1	1.1	1.2		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Manganese	550	1.1	5.0		mg/Kg	50	10/11/2012 12:16:30 PM	4190
Nickel	2.9	0.83	2.5		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 10:26:23 AM	4190
Vanadium	9.8	0.28	12	J	mg/Kg	5	10/11/2012 10:26:23 AM	4190
Zinc	7.8	5.0	12	J	mg/Kg	5	10/11/2012 10:26:23 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-008B

Client Sample ID: SWMU 1-5 (26-27')
Collection Date: 10/3/2012 6:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	0.63	2.5		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Arsenic	ND	0.63	2.5		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Barium	230	0.30	0.50		mg/Kg	5	10/11/2012 10:31:19 AM	4190
Beryllium	0.30	0.0093	0.15		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Cadmium	ND	0.027	0.10		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Chromium	5.1	0.12	0.30		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Cobalt	2.1	0.069	0.30		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Iron	5900	370	500		mg/Kg	500	10/11/2012 12:21:48 PM	4190
Lead	0.57	0.22	0.25		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Manganese	200	0.11	0.50		mg/Kg	5	10/11/2012 10:31:19 AM	4190
Nickel	3.5	0.17	0.50		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Selenium	ND	1.4	2.5		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Silver	ND	0.035	0.25		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Vanadium	8.6	0.056	2.5		mg/Kg	1	10/11/2012 10:28:52 AM	4190
Zinc	8.5	1.0	2.5		mg/Kg	1	10/11/2012 10:28:52 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-009C

Client Sample ID: SWMU 1-5 (27-28')
Collection Date: 10/3/2012 6:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 2:31:31 PM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 2:31:31 PM	4190
Barium	380	3.0	5.0		mg/Kg	50	10/11/2012 12:24:38 PM	4190
Beryllium	1.1	0.046	0.75		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Chromium	15	0.59	1.5		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Cobalt	7.8	0.34	1.5		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Iron	17000	370	500		mg/Kg	500	10/11/2012 12:27:03 PM	4190
Lead	ND	1.1	1.2		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Manganese	640	1.1	5.0		mg/Kg	50	10/11/2012 12:24:38 PM	4190
Nickel	12	0.83	2.5		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Vanadium	22	0.28	12		mg/Kg	5	10/11/2012 10:45:59 AM	4190
Zinc	31	5.0	12		mg/Kg	5	10/11/2012 10:45:59 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-012C

Client Sample ID: SWMU 1-5 (10-12')
Collection Date: 10/3/2012 5:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Barium	610	3.0	5.0		mg/Kg	50	10/11/2012 12:31:20 PM	4190
Beryllium	0.57	0.046	0.75	J	mg/Kg	5	10/11/2012 11:00:15 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Chromium	11	0.59	1.5		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Cobalt	3.3	0.34	1.5		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Iron	9200	370	500		mg/Kg	500	10/11/2012 12:44:37 PM	4190
Lead	3.9	1.1	1.2		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Manganese	1300	1.1	5.0		mg/Kg	50	10/11/2012 12:31:20 PM	4190
Nickel	4.5	0.83	2.5		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Vanadium	15	0.28	12		mg/Kg	5	10/11/2012 11:00:15 AM	4190
Zinc	12	5.0	12	J	mg/Kg	5	10/11/2012 11:00:15 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-013C

Client Sample ID: SWMU 1-5 (14-16')
Collection Date: 10/3/2012 5:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Barium	640	3.0	5.0		mg/Kg	50	10/11/2012 12:47:28 PM	4190
Beryllium	0.67	0.046	0.75	J	mg/Kg	5	10/11/2012 11:05:28 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Chromium	11	0.59	1.5		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Cobalt	3.9	0.34	1.5		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Iron	11000	370	500		mg/Kg	500	10/11/2012 12:49:54 PM	4190
Lead	4.4	1.1	1.2		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Manganese	1200	1.1	5.0		mg/Kg	50	10/11/2012 12:47:28 PM	4190
Nickel	5.9	0.83	2.5		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Vanadium	19	0.28	12		mg/Kg	5	10/11/2012 11:05:28 AM	4190
Zinc	14	5.0	12		mg/Kg	5	10/11/2012 11:05:28 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-014C

Client Sample ID: SWMU 1-5 (16-18')
Collection Date: 10/3/2012 6:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Barium	690	3.0	5.0		mg/Kg	50	10/11/2012 12:52:45 PM	4190
Beryllium	0.54	0.046	0.75	J	mg/Kg	5	10/11/2012 11:10:31 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Chromium	7.9	0.59	1.5		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Cobalt	3.7	0.34	1.5		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Iron	15000	370	500		mg/Kg	500	10/11/2012 12:55:08 PM	4190
Lead	7.7	1.1	1.2		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Manganese	1400	1.1	5.0		mg/Kg	50	10/11/2012 12:52:45 PM	4190
Nickel	5.1	0.83	2.5		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Vanadium	34	0.28	12		mg/Kg	5	10/11/2012 11:10:31 AM	4190
Zinc	12	5.0	12	J	mg/Kg	5	10/11/2012 11:10:31 AM	4190

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210332-015C

Client Sample ID: SWMU 1-5 (24-25')
Collection Date: 10/3/2012 6:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 2:22:14 PM	4190
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Barium	630	3.0	5.0		mg/Kg	50	10/11/2012 12:57:46 PM	4190
Beryllium	0.49	0.046	0.75	J	mg/Kg	5	10/11/2012 11:29:11 AM	4190
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Chromium	7.7	0.59	1.5		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Cobalt	3.5	0.34	1.5		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Iron	8700	370	500		mg/Kg	500	10/11/2012 1:00:09 PM	4190
Lead	3.5	1.1	1.2		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Manganese	1200	1.1	5.0		mg/Kg	50	10/11/2012 12:57:46 PM	4190
Nickel	4.9	0.83	2.5		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Vanadium	14	0.28	12		mg/Kg	5	10/11/2012 11:29:11 AM	4190
Zinc	12	5.0	12	J	mg/Kg	5	10/11/2012 11:29:11 AM	4190

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

Qualifiers:

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

Analytical Report
Lab Order: **1210372**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-001B

Client Sample ID: SWMU 1-1 (2-4')
Collection Date: 10/5/2012 2:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Barium	450	0.61	1.0		mg/Kg	10	10/11/2012 3:14:12 PM	4191
Beryllium	0.63	0.046	0.75	J	mg/Kg	5	10/11/2012 2:29:04 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Chromium	400	1.2	3.0		mg/Kg	10	10/11/2012 3:14:12 PM	4191
Cobalt	8.1	0.34	1.5		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Iron	16000	370	500		mg/Kg	500	10/11/2012 3:19:11 PM	4191
Lead	80	1.1	1.2		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Manganese	480	0.21	1.0		mg/Kg	10	10/11/2012 3:14:12 PM	4191
Nickel	15	0.83	2.5		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Vanadium	20	0.28	12		mg/Kg	5	10/11/2012 2:29:04 PM	4191
Zinc	720	50	120		mg/Kg	50	10/11/2012 3:16:43 PM	4191

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

Qualifiers:

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

Analytical Report
Lab Order: **1210372**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-002A

Client Sample ID: SWMU 1-1 (10-12')
Collection Date: 10/5/2012 2:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Barium	300	0.61	1.0		mg/Kg	10	10/11/2012 3:21:49 PM	4191
Beryllium	1.2	0.046	0.75		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Chromium	16	0.59	1.5		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Cobalt	7.5	0.34	1.5		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Iron	23000	370	500		mg/Kg	500	10/11/2012 3:29:57 PM	4191
Lead	3.3	1.1	1.2		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Manganese	290	0.21	1.0		mg/Kg	10	10/11/2012 3:21:49 PM	4191
Nickel	15	0.83	2.5		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Vanadium	25	0.28	12		mg/Kg	5	10/11/2012 2:47:13 PM	4191
Zinc	29	5.0	12		mg/Kg	5	10/11/2012 2:47:13 PM	4191

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

Qualifiers:

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

Analytical Report
Lab Order: **1210372**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-003B

Client Sample ID: SWMU 1-1 (13-14')
Collection Date: 10/5/2012 2:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	6.3	25		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Arsenic	ND	6.3	25		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Barium	630	3.0	5.0		mg/Kg	50	10/11/2012 3:39:36 PM	4191
Beryllium	0.55	0.093	1.5	J	mg/Kg	10	10/11/2012 3:32:36 PM	4191
Cadmium	ND	0.27	1.0		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Chromium	6.8	1.2	3.0		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Cobalt	8.0	0.69	3.0		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Iron	8100	370	500		mg/Kg	500	10/11/2012 3:41:59 PM	4191
Lead	ND	2.2	2.5		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Manganese	2800	11	50		mg/Kg	500	10/11/2012 3:41:59 PM	4191
Nickel	8.3	1.7	5.0		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Selenium	ND	14	25		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Silver	ND	0.35	2.5		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Vanadium	30	0.57	25		mg/Kg	10	10/11/2012 3:32:36 PM	4191
Zinc	24	10	25	J	mg/Kg	10	10/11/2012 3:32:36 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-004C

Client Sample ID: SWMU 1-8 (16-18') DUP
Collection Date: 10/5/2012 11:10:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Barium	530	3.0	5.0		mg/Kg	50	10/11/2012 3:47:18 PM	4191
Beryllium	0.53	0.046	0.75	J	mg/Kg	5	10/11/2012 3:44:52 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Chromium	6.6	0.59	1.5		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Cobalt	3.5	0.34	1.5		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Iron	9100	370	500		mg/Kg	500	10/11/2012 3:49:43 PM	4191
Lead	2.5	1.1	1.2		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Manganese	660	1.1	5.0		mg/Kg	50	10/11/2012 3:47:18 PM	4191
Nickel	4.4	0.83	2.5		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Vanadium	23	0.28	12		mg/Kg	5	10/11/2012 3:44:52 PM	4191
Zinc	12	5.0	12	J	mg/Kg	5	10/11/2012 3:44:52 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-005C

Client Sample ID: SWMU 1-8 (19-20')
Collection Date: 10/5/2012 11:25:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Barium	300	3.0	5.0		mg/Kg	50	10/11/2012 3:55:01 PM	4191
Beryllium	0.95	0.046	0.75		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Chromium	14	0.59	1.5		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Cobalt	8.2	0.34	1.5		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Iron	19000	370	500		mg/Kg	500	10/11/2012 3:57:26 PM	4191
Lead	ND	1.1	1.2		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Manganese	300	1.1	5.0		mg/Kg	50	10/11/2012 3:55:01 PM	4191
Nickel	12	0.83	2.5		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Vanadium	26	0.28	12		mg/Kg	5	10/11/2012 3:52:34 PM	4191
Zinc	29	5.0	12		mg/Kg	5	10/11/2012 3:52:34 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-006C

Client Sample ID: SWMU 1-8 (4-6')
Collection Date: 10/5/2012 10:20:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Barium	540	3.0	5.0		mg/Kg	50	10/11/2012 4:10:00 PM	4191
Beryllium	0.49	0.046	0.75	J	mg/Kg	5	10/11/2012 4:05:56 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Chromium	5.3	0.59	1.5		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Cobalt	3.0	0.34	1.5		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Iron	7900	370	500		mg/Kg	500	10/11/2012 4:15:16 PM	4191
Lead	3.4	1.1	1.2		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Manganese	390	1.1	5.0		mg/Kg	50	10/11/2012 4:10:00 PM	4191
Nickel	4.5	0.83	2.5		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Vanadium	19	0.28	12		mg/Kg	5	10/11/2012 4:05:56 PM	4191
Zinc	10	5.0	12	J	mg/Kg	5	10/11/2012 4:05:56 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-007B

Client Sample ID: SWMU 1-8 (10-12')
Collection Date: 10/5/2012 10:30:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Barium	620	3.0	5.0		mg/Kg	50	10/11/2012 4:20:33 PM	4191
Beryllium	0.67	0.046	0.75	J	mg/Kg	5	10/11/2012 4:18:09 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Chromium	21	0.59	1.5		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Cobalt	6.6	0.34	1.5		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Iron	15000	370	500		mg/Kg	500	10/11/2012 4:22:59 PM	4191
Lead	8.2	1.1	1.2		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Manganese	810	1.1	5.0		mg/Kg	50	10/11/2012 4:20:33 PM	4191
Nickel	16	0.83	2.5		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Vanadium	26	0.28	12		mg/Kg	5	10/11/2012 4:18:09 PM	4191
Zinc	60	5.0	12		mg/Kg	5	10/11/2012 4:18:09 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-008D

Client Sample ID: SWMU 1-8 (12-14')
Collection Date: 10/5/2012 10:40:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Barium	370	3.0	5.0		mg/Kg	50	10/11/2012 4:28:05 PM	4191
Beryllium	0.52	0.046	0.75	J	mg/Kg	5	10/11/2012 4:25:38 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Chromium	10	0.59	1.5		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Cobalt	4.1	0.34	1.5		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Iron	8000	370	500		mg/Kg	500	10/11/2012 4:30:34 PM	4191
Lead	2.0	1.1	1.2		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Manganese	540	1.1	5.0		mg/Kg	50	10/11/2012 4:28:05 PM	4191
Nickel	6.8	0.83	2.5		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Vanadium	15	0.28	12		mg/Kg	5	10/11/2012 4:25:38 PM	4191
Zinc	18	5.0	12		mg/Kg	5	10/11/2012 4:25:38 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-009C

Client Sample ID: SWMU 1-8 (16-18')
Collection Date: 10/5/2012 11:10:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Barium	550	3.0	5.0		mg/Kg	50	10/11/2012 4:43:28 PM	4191
Beryllium	0.59	0.046	0.75	J	mg/Kg	5	10/11/2012 4:33:26 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Chromium	6.9	0.59	1.5		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Cobalt	4.4	0.34	1.5		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Iron	11000	370	500		mg/Kg	500	10/11/2012 4:45:54 PM	4191
Lead	2.8	1.1	1.2		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Manganese	740	1.1	5.0		mg/Kg	50	10/11/2012 4:43:28 PM	4191
Nickel	6.1	0.83	2.5		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Vanadium	16	0.28	12		mg/Kg	5	10/11/2012 4:33:26 PM	4191
Zinc	14	5.0	12		mg/Kg	5	10/11/2012 4:33:26 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-015C

Client Sample ID: SWMU 1-7 (16-18')
Collection Date: 10/4/2012 2:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Arsenic	3.2	3.1	12	J	mg/Kg	5	10/11/2012 4:48:45 PM	4191
Barium	330	3.0	5.0		mg/Kg	50	10/11/2012 4:51:11 PM	4191
Beryllium	1.1	0.046	0.75		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Chromium	15	0.59	1.5		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Cobalt	6.4	0.34	1.5		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Iron	22000	370	500		mg/Kg	500	10/11/2012 4:53:35 PM	4191
Lead	1.7	1.1	1.2		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Manganese	510	1.1	5.0		mg/Kg	50	10/11/2012 4:51:11 PM	4191
Nickel	13	0.83	2.5		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Vanadium	28	0.28	12		mg/Kg	5	10/11/2012 4:48:45 PM	4191
Zinc	25	5.0	12		mg/Kg	5	10/11/2012 4:48:45 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-016C

Client Sample ID: SWMU 1-6 (10-11')
Collection Date: 10/4/2012 11:45:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Barium	380	3.0	5.0		mg/Kg	50	10/11/2012 4:58:37 PM	4191
Beryllium	0.56	0.046	0.75	J	mg/Kg	5	10/11/2012 4:56:13 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Chromium	7.2	0.59	1.5		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Cobalt	3.8	0.34	1.5		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Iron	11000	370	500		mg/Kg	500	10/11/2012 5:01:02 PM	4191
Lead	3.6	1.1	1.2		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Manganese	750	1.1	5.0		mg/Kg	50	10/11/2012 4:58:37 PM	4191
Nickel	5.5	0.83	2.5		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Vanadium	16	0.28	12		mg/Kg	5	10/11/2012 4:56:13 PM	4191
Zinc	13	5.0	12		mg/Kg	5	10/11/2012 4:56:13 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-017C

Client Sample ID: SWMU 1-6 (11-12')
Collection Date: 10/4/2012 11:55:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Barium	700	3.0	5.0		mg/Kg	50	10/11/2012 5:12:21 PM	4191
Beryllium	0.96	0.046	0.75		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Chromium	14	0.59	1.5		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Cobalt	6.2	0.34	1.5		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Iron	18000	370	500		mg/Kg	500	10/11/2012 5:16:24 PM	4191
Lead	ND	1.1	1.2		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Manganese	480	1.1	5.0		mg/Kg	50	10/11/2012 5:12:21 PM	4191
Nickel	12	0.83	2.5		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Vanadium	16	0.28	12		mg/Kg	5	10/11/2012 5:03:56 PM	4191
Zinc	25	5.0	12		mg/Kg	5	10/11/2012 5:03:56 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-018C

Client Sample ID: SWMU 1-7 (12-14')
Collection Date: 10/4/2012 1:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Barium	87	0.30	0.50		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Beryllium	1.1	0.046	0.75		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Chromium	12	0.59	1.5		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Cobalt	5.4	0.34	1.5		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Iron	16000	370	500		mg/Kg	500	10/11/2012 5:26:48 PM	4191
Lead	4.0	1.1	1.2		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Manganese	360	1.1	5.0		mg/Kg	50	10/11/2012 5:24:24 PM	4191
Nickel	9.3	0.83	2.5		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Vanadium	20	0.28	12		mg/Kg	5	10/11/2012 5:21:56 PM	4191
Zinc	18	5.0	12		mg/Kg	5	10/11/2012 5:21:56 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-019C

Client Sample ID: SWMU 1-7 (14-16')
Collection Date: 10/4/2012 2:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Barium	290	3.0	5.0		mg/Kg	50	10/11/2012 5:31:52 PM	4191
Beryllium	0.95	0.046	0.75		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Chromium	11	0.59	1.5		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Cobalt	6.0	0.34	1.5		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Iron	15000	370	500		mg/Kg	500	10/11/2012 5:34:18 PM	4191
Lead	3.3	1.1	1.2		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Manganese	790	1.1	5.0		mg/Kg	50	10/11/2012 5:31:52 PM	4191
Nickel	9.7	0.83	2.5		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Vanadium	16	0.28	12		mg/Kg	5	10/11/2012 5:29:25 PM	4191
Zinc	18	5.0	12		mg/Kg	5	10/11/2012 5:29:25 PM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-020B

Client Sample ID: SWMU 1-6 (2-4')
Collection Date: 10/4/2012 10:55:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	6.3	25		mg/Kg	10	10/15/2012 10:16:58 AM	4191
Arsenic	ND	6.3	25		mg/Kg	10	10/15/2012 10:16:58 AM	4191
Barium	660	3.0	5.0		mg/Kg	50	10/11/2012 5:39:21 PM	4191
Beryllium	0.49	0.093	1.5	J	mg/Kg	10	10/15/2012 10:16:58 AM	4191
Cadmium	ND	0.27	1.0		mg/Kg	10	10/15/2012 10:16:58 AM	4191
Chromium	6.1	1.2	3.0		mg/Kg	10	10/15/2012 10:16:58 AM	4191
Cobalt	3.5	0.69	3.0		mg/Kg	10	10/15/2012 10:16:58 AM	4191
Iron	9600	370	500		mg/Kg	500	10/11/2012 5:49:22 PM	4191
Lead	5.4	2.2	2.5		mg/Kg	10	10/15/2012 10:16:58 AM	4191
Manganese	1000	1.1	5.0		mg/Kg	50	10/11/2012 5:39:21 PM	4191
Nickel	4.5	1.7	5.0	J	mg/Kg	10	10/15/2012 10:16:58 AM	4191
Selenium	ND	14	25		mg/Kg	10	10/15/2012 10:35:25 AM	4191
Silver	ND	0.35	2.5		mg/Kg	10	10/15/2012 10:16:58 AM	4191
Vanadium	18	0.57	25	J	mg/Kg	10	10/15/2012 10:16:58 AM	4191
Zinc	13	10	25	J	mg/Kg	10	10/15/2012 10:16:58 AM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-021B

Client Sample ID: SWMU 1-6 (2-4') DUP
Collection Date: 10/4/2012 10:55:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 5:52:15 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/15/2012 10:19:16 AM	4191
Barium	930	3.0	5.0		mg/Kg	50	10/11/2012 5:57:34 PM	4191
Beryllium	0.51	0.046	0.75	J	mg/Kg	5	10/11/2012 5:52:15 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 5:52:15 PM	4191
Chromium	7.0	0.59	1.5		mg/Kg	5	10/15/2012 10:19:16 AM	4191
Cobalt	3.9	0.34	1.5		mg/Kg	5	10/11/2012 5:52:15 PM	4191
Iron	10000	370	500		mg/Kg	500	10/11/2012 6:00:01 PM	4191
Lead	5.0	1.1	1.2		mg/Kg	5	10/11/2012 5:52:15 PM	4191
Manganese	830	1.1	5.0		mg/Kg	50	10/11/2012 5:57:34 PM	4191
Nickel	5.2	0.83	2.5		mg/Kg	5	10/11/2012 5:52:15 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/15/2012 10:37:40 AM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 5:52:15 PM	4191
Vanadium	24	0.28	12		mg/Kg	5	10/11/2012 5:52:15 PM	4191
Zinc	13	5.0	12		mg/Kg	5	10/15/2012 10:19:16 AM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-022C

Client Sample ID: SWMU 1-6 (4-6')
Collection Date: 10/4/2012 11:15:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 6:02:53 PM	4191
Arsenic	ND	3.1	12		mg/Kg	5	10/15/2012 10:21:33 AM	4191
Barium	870	3.0	5.0		mg/Kg	50	10/11/2012 6:05:17 PM	4191
Beryllium	0.44	0.046	0.75	J	mg/Kg	5	10/11/2012 6:02:53 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 6:02:53 PM	4191
Chromium	7.0	0.59	1.5		mg/Kg	5	10/15/2012 10:21:33 AM	4191
Cobalt	5.7	0.34	1.5		mg/Kg	5	10/11/2012 6:02:53 PM	4191
Iron	9500	370	500		mg/Kg	500	10/11/2012 6:07:44 PM	4191
Lead	5.6	1.1	1.2		mg/Kg	5	10/11/2012 6:02:53 PM	4191
Manganese	1100	1.1	5.0		mg/Kg	50	10/11/2012 6:05:17 PM	4191
Nickel	5.2	0.83	2.5		mg/Kg	5	10/11/2012 6:02:53 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/15/2012 10:39:58 AM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 6:02:53 PM	4191
Vanadium	16	0.28	12		mg/Kg	5	10/11/2012 6:02:53 PM	4191
Zinc	15	5.0	12		mg/Kg	5	10/15/2012 10:21:33 AM	4191

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210372-023C

Client Sample ID: SWMU 1-6 (7.5-8')
Collection Date: 10/4/2012 11:30:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Arsenic	4.6	3.1	12	J	mg/Kg	5	10/15/2012 10:23:51 AM	4191
Barium	110	0.30	0.50		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Beryllium	0.83	0.046	0.75		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Cadmium	ND	0.14	0.50		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Chromium	8.3	0.59	1.5		mg/Kg	5	10/15/2012 10:23:51 AM	4191
Cobalt	4.1	0.34	1.5		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Iron	13000	370	500		mg/Kg	500	10/11/2012 6:15:26 PM	4191
Lead	4.1	1.1	1.2		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Manganese	390	1.1	5.0		mg/Kg	50	10/11/2012 6:13:03 PM	4191
Nickel	6.7	0.83	2.5		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Selenium	ND	7.0	12		mg/Kg	5	10/15/2012 10:42:12 AM	4191
Silver	ND	0.18	1.2		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Vanadium	14	0.28	12		mg/Kg	5	10/11/2012 6:10:37 PM	4191
Zinc	14	5.0	12		mg/Kg	5	10/15/2012 10:23:51 AM	4191

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

Qualifiers:

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

Analytical Report
Lab Order: **1210521**
Date Reported: **11/12/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210521-001C

Client Sample ID: SWMU 1-24 (0-0.5')
Collection Date: 10/8/2012 4:05:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Barium	220	0.61	1.0		mg/Kg	10	10/16/2012 3:55:33 PM	4298
Beryllium	0.68	0.046	0.75	J	mg/Kg	5	10/16/2012 3:30:30 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Chromium	9.5	0.59	1.5		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Cobalt	5.1	0.34	1.5		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Iron	20000	370	500		mg/Kg	500	10/16/2012 3:52:52 PM	4298
Lead	9.3	1.1	1.2		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Manganese	520	1.1	5.0		mg/Kg	50	10/16/2012 3:50:28 PM	4298
Nickel	9.0	0.83	2.5		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Vanadium	24	0.28	12		mg/Kg	5	10/16/2012 3:30:30 PM	4298
Zinc	34	5.0	12		mg/Kg	5	10/16/2012 3:30:30 PM	4298

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210521-002C

Client Sample ID: SWMU 1-24 (0-0.5') DUP
Collection Date: 10/8/2012 4:05:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Barium	180	0.30	0.50		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Beryllium	0.57	0.046	0.75	J	mg/Kg	5	10/16/2012 4:00:28 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Chromium	9.6	0.59	1.5		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Cobalt	4.4	0.34	1.5		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Iron	10000	370	500		mg/Kg	500	10/16/2012 4:05:17 PM	4298
Lead	7.8	1.1	1.2		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Manganese	290	1.1	5.0		mg/Kg	50	10/16/2012 4:02:52 PM	4298
Nickel	8.5	0.83	2.5		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Vanadium	18	0.28	12		mg/Kg	5	10/16/2012 4:00:28 PM	4298
Zinc	29	5.0	12		mg/Kg	5	10/16/2012 4:00:28 PM	4298

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210521-003C

Client Sample ID: SWMU 1-24 (1.5-2')
Collection Date: 10/8/2012 4:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Barium	330	3.0	5.0		mg/Kg	50	10/16/2012 4:25:31 PM	4298
Beryllium	0.86	0.046	0.75		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Chromium	7.4	0.59	1.5		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Cobalt	4.4	0.34	1.5		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Iron	12000	370	500		mg/Kg	500	10/16/2012 4:27:56 PM	4298
Lead	4.4	1.1	1.2		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Manganese	410	1.1	5.0		mg/Kg	50	10/16/2012 4:25:31 PM	4298
Nickel	7.0	0.83	2.5		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Vanadium	14	0.28	12		mg/Kg	5	10/16/2012 4:23:04 PM	4298
Zinc	13	5.0	12		mg/Kg	5	10/16/2012 4:23:04 PM	4298

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210521-004C

Client Sample ID: SWMU 1-24 (10.5-11.5')
Collection Date: 10/8/2012 4:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Barium	360	3.0	5.0		mg/Kg	50	10/16/2012 4:33:01 PM	4298
Beryllium	0.75	0.046	0.75	J	mg/Kg	5	10/16/2012 4:30:35 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Chromium	4.9	0.59	1.5		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Cobalt	3.9	0.34	1.5		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Iron	10000	370	500		mg/Kg	500	10/16/2012 4:35:27 PM	4298
Lead	5.2	1.1	1.2		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Manganese	710	1.1	5.0		mg/Kg	50	10/16/2012 4:33:01 PM	4298
Nickel	5.6	0.83	2.5		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Vanadium	13	0.28	12		mg/Kg	5	10/16/2012 4:30:35 PM	4298
Zinc	11	5.0	12	J	mg/Kg	5	10/16/2012 4:30:35 PM	4298

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210521-005C

Client Sample ID: SWMU 1-24 (16-18')
Collection Date: 10/8/2012 4:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Barium	480	3.0	5.0		mg/Kg	50	10/16/2012 4:40:30 PM	4298
Beryllium	0.57	0.046	0.75	J	mg/Kg	5	10/16/2012 4:38:05 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Chromium	5.9	0.59	1.5		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Cobalt	3.0	0.34	1.5		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Iron	9500	370	500		mg/Kg	500	10/16/2012 4:44:35 PM	4298
Lead	4.9	1.1	1.2		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Manganese	790	1.1	5.0		mg/Kg	50	10/16/2012 4:40:30 PM	4298
Nickel	4.7	0.83	2.5		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Vanadium	16	0.28	12		mg/Kg	5	10/16/2012 4:38:05 PM	4298
Zinc	11	5.0	12	J	mg/Kg	5	10/16/2012 4:38:05 PM	4298

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210521-006C

Client Sample ID: SWMU 1-24 (24-26')
Collection Date: 10/8/2012 4:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Barium	160	0.30	0.50		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Beryllium	0.89	0.046	0.75		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Chromium	9.9	0.59	1.5		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Cobalt	4.8	0.34	1.5		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Iron	13000	370	500		mg/Kg	500	10/16/2012 5:00:50 PM	4298
Lead	3.4	1.1	1.2		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Manganese	640	1.1	5.0		mg/Kg	50	10/16/2012 4:58:26 PM	4298
Nickel	7.7	0.83	2.5		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 9:41:06 AM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Vanadium	23	0.28	12		mg/Kg	5	10/16/2012 4:47:26 PM	4298
Zinc	17	5.0	12		mg/Kg	5	10/16/2012 4:47:26 PM	4298

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210521-007C

Client Sample ID: SWMU 1-24 (32-34')
Collection Date: 10/8/2012 5:05:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Barium	220	0.30	0.50		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Beryllium	0.64	0.046	0.75	J	mg/Kg	5	10/16/2012 5:03:26 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Chromium	8.1	0.59	1.5		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Cobalt	3.9	0.34	1.5		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Iron	24000	370	500		mg/Kg	500	10/16/2012 5:08:16 PM	4298
Lead	8.6	1.1	1.2		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Manganese	730	1.1	5.0		mg/Kg	50	10/16/2012 5:05:52 PM	4298
Nickel	5.0	0.83	2.5		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 6:35:11 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Vanadium	53	0.28	12		mg/Kg	5	10/16/2012 5:03:26 PM	4298
Zinc	12	5.0	12	J	mg/Kg	5	10/16/2012 5:03:26 PM	4298

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

Qualifiers:

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

Analytical Report
Lab Order: **1210653**
Date Reported: **11/16/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210653-001C

Client Sample ID: SWMU 1-37 (0-0.5')
Collection Date: 10/10/2012 5:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Arsenic	ND	1.3	5.0		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Barium	350	0.61	1.0		mg/Kg	10	10/25/2012 12:29:16 PM	4440
Beryllium	0.85	0.019	0.30		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Chromium	17	0.24	0.60		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Cobalt	4.7	0.14	0.60		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Iron	18000	370	500		mg/Kg	500	11/2/2012 6:21:33 AM	4440
Lead	2.8	0.44	0.50		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Manganese	610	0.42	2.0		mg/Kg	20	10/25/2012 2:24:36 PM	4440
Nickel	8.4	0.33	1.0		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/29/2012 2:11:45 PM	4440
Vanadium	18	0.11	5.0		mg/Kg	2	10/25/2012 9:46:22 AM	4440
Zinc	22	2.0	5.0		mg/Kg	2	10/25/2012 9:46:22 AM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210653-002C

Client Sample ID: SWMU 1-37 (1.5-2')
Collection Date: 10/10/2012 5:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Arsenic	2.2	1.3	5.0	J	mg/Kg	2	10/25/2012 9:51:37 AM	4440
Barium	370	0.61	1.0		mg/Kg	10	10/25/2012 12:42:54 PM	4440
Beryllium	0.79	0.019	0.30		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Chromium	24	0.24	0.60		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Cobalt	4.4	0.14	0.60		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Iron	16000	370	500		mg/Kg	500	11/2/2012 6:24:23 AM	4440
Lead	3.1	0.44	0.50		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Manganese	570	0.42	2.0		mg/Kg	20	10/25/2012 2:27:00 PM	4440
Nickel	7.6	0.33	1.0		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/29/2012 2:27:29 PM	4440
Vanadium	19	0.11	5.0		mg/Kg	2	10/25/2012 9:51:37 AM	4440
Zinc	25	2.0	5.0		mg/Kg	2	10/25/2012 9:51:37 AM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210653-003C

Client Sample ID: SWMU 1-37 (8-8.5')
Collection Date: 10/10/2012 5:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Arsenic	2.1	1.3	5.0	J	mg/Kg	2	10/25/2012 10:06:49 AM	4440
Barium	130	0.61	1.0		mg/Kg	10	10/25/2012 12:47:59 PM	4440
Beryllium	0.77	0.019	0.30		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Chromium	10	0.24	0.60		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Cobalt	4.1	0.14	0.60		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Iron	18000	370	500		mg/Kg	500	11/2/2012 6:27:16 AM	4440
Lead	3.6	0.44	0.50		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Manganese	350	0.21	1.0		mg/Kg	10	10/25/2012 12:47:59 PM	4440
Nickel	7.3	0.33	1.0		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/29/2012 2:32:46 PM	4440
Vanadium	17	0.11	5.0		mg/Kg	2	10/25/2012 10:06:49 AM	4440
Zinc	16	2.0	5.0		mg/Kg	2	10/25/2012 10:06:49 AM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210653-004C

Client Sample ID: SWMU 1-37 (8.5-9')
Collection Date: 10/10/2012 5:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Arsenic	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Barium	130	0.61	1.0		mg/Kg	10	10/25/2012 12:54:40 PM	4440
Beryllium	0.83	0.019	0.30		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Chromium	8.6	0.24	0.60		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Cobalt	3.8	0.14	0.60		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Iron	16000	370	500		mg/Kg	500	11/2/2012 6:30:08 AM	4440
Lead	2.8	0.44	0.50		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Manganese	230	0.21	1.0		mg/Kg	10	10/25/2012 12:54:40 PM	4440
Nickel	6.9	0.33	1.0		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/29/2012 2:38:00 PM	4440
Vanadium	14	0.11	5.0		mg/Kg	2	10/25/2012 10:12:01 AM	4440
Zinc	13	2.0	5.0		mg/Kg	2	10/25/2012 10:12:01 AM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210653-005C

Client Sample ID: SWMU 1-37 (12-13')
Collection Date: 10/10/2012 5:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Arsenic	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Barium	210	0.61	1.0		mg/Kg	10	10/25/2012 12:59:33 PM	4440
Beryllium	0.72	0.019	0.30		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Chromium	15	0.24	0.60		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Cobalt	4.1	0.14	0.60		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Iron	15000	370	500		mg/Kg	500	11/2/2012 6:43:03 AM	4440
Lead	2.8	0.44	0.50		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Manganese	530	0.42	2.0		mg/Kg	20	10/25/2012 2:32:04 PM	4440
Nickel	6.9	0.33	1.0		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/29/2012 2:43:15 PM	4440
Vanadium	17	0.11	5.0		mg/Kg	2	10/25/2012 10:17:05 AM	4440
Zinc	16	2.0	5.0		mg/Kg	2	10/25/2012 10:17:05 AM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210653-006C

Client Sample ID: SWMU 1-37 (13-14')
Collection Date: 10/10/2012 6:05:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Arsenic	ND	3.1	12		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Barium	280	0.61	1.0		mg/Kg	10	10/25/2012 1:06:48 PM	4440
Beryllium	1.2	0.046	0.75		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Cadmium	ND	0.14	0.50		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Chromium	13	0.59	1.5		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Cobalt	6.0	0.34	1.5		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Iron	20000	370	500		mg/Kg	500	11/2/2012 6:45:53 AM	4440
Lead	4.0	1.1	1.2		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Manganese	320	0.21	1.0		mg/Kg	10	10/25/2012 1:06:48 PM	4440
Nickel	11	0.83	2.5		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Selenium	ND	7.0	12		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Silver	ND	0.18	1.3		mg/Kg	5	10/29/2012 2:48:38 PM	4440
Vanadium	20	0.28	12		mg/Kg	5	10/25/2012 1:04:23 PM	4440
Zinc	20	5.0	12		mg/Kg	5	10/25/2012 1:04:23 PM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210653-007C

Client Sample ID: SWMU 1-37 (17-18')
Collection Date: 10/10/2012 6:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Arsenic	3.9	3.1	12	J	mg/Kg	5	10/25/2012 1:20:11 PM	4440
Barium	870	3.0	5.0		mg/Kg	50	10/25/2012 1:22:36 PM	4440
Beryllium	1.0	0.046	0.75		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Cadmium	ND	0.14	0.50		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Chromium	13	0.59	1.5		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Cobalt	6.2	0.34	1.5		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Iron	24000	750	1000		mg/Kg	1000	11/2/2012 6:48:43 AM	4440
Lead	5.0	1.1	1.2		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Manganese	1400	1.1	5.0		mg/Kg	50	10/25/2012 1:22:36 PM	4440
Nickel	12	0.83	2.5		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Selenium	ND	7.0	12		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Silver	ND	0.18	1.2		mg/Kg	5	10/29/2012 3:03:53 PM	4440
Vanadium	16	0.28	12		mg/Kg	5	10/25/2012 1:20:11 PM	4440
Zinc	21	5.0	12		mg/Kg	5	10/25/2012 1:20:11 PM	4440

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

Qualifiers:

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

Analytical Report
Lab Order: **1210692**
Date Reported: **11/26/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-001C

Client Sample ID: SWMU 1-20 (0-0.5')
Collection Date: 10/11/2012 12:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Arsenic	2.6	1.3	5.0	J	mg/Kg	2	10/25/2012 9:11:00 PM	4498
Barium	740	1.2	2.0		mg/Kg	20	11/2/2012 7:24:51 AM	4498
Beryllium	0.71	0.019	0.30		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Chromium	19	0.24	0.60		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Cobalt	4.0	0.14	0.60		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Iron	15000	370	500		mg/Kg	500	11/2/2012 7:27:16 AM	4498
Lead	2.6	0.44	0.50		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Manganese	650	0.42	2.0		mg/Kg	20	11/2/2012 7:24:51 AM	4498
Nickel	6.9	0.33	1.0		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Vanadium	22	0.11	5.0		mg/Kg	2	10/25/2012 9:11:00 PM	4498
Zinc	22	2.0	5.0		mg/Kg	2	10/25/2012 9:11:00 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-002C

Client Sample ID: SWMU 1-20 (0-0.5') DUP
Collection Date: 10/11/2012 12:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	13		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Arsenic	ND	3.1	13		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Barium	840	1.2	2.0		mg/Kg	20	11/2/2012 9:49:13 AM	4498
Beryllium	0.94	0.047	0.75		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Cadmium	ND	0.14	0.50		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Chromium	23	0.59	1.5		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Cobalt	5.4	0.34	1.5		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Iron	19000	370	500		mg/Kg	500	11/2/2012 9:51:40 AM	4498
Lead	3.4	1.1	1.3		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Manganese	680	0.42	2.0		mg/Kg	20	11/2/2012 9:49:13 AM	4498
Nickel	8.5	0.83	2.5		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Selenium	ND	7.0	13		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Silver	ND	0.18	1.3		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Vanadium	32	0.28	13		mg/Kg	5	11/2/2012 7:30:09 AM	4498
Zinc	28	5.0	13		mg/Kg	5	11/2/2012 7:30:09 AM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-003C

Client Sample ID: SWMU 1-20 (1.5-2')
Collection Date: 10/11/2012 12:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	13		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Arsenic	ND	3.1	13		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Barium	1000	3.0	5.0		mg/Kg	50	11/2/2012 10:25:25 AM	4498
Beryllium	0.74	0.047	0.75	J	mg/Kg	5	11/2/2012 7:32:33 AM	4498
Cadmium	ND	0.14	0.50		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Chromium	11	0.59	1.5		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Cobalt	4.7	0.34	1.5		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Iron	16000	370	500		mg/Kg	500	11/2/2012 9:56:46 AM	4498
Lead	3.9	1.1	1.3		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Manganese	950	0.42	2.0		mg/Kg	20	11/2/2012 9:54:19 AM	4498
Nickel	7.3	0.83	2.5		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Selenium	ND	7.0	13		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Silver	ND	0.18	1.3		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Vanadium	29	0.28	13		mg/Kg	5	11/2/2012 7:32:33 AM	4498
Zinc	17	5.0	13		mg/Kg	5	11/2/2012 7:32:33 AM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-004C

Client Sample ID: SWMU 1-20 (4-6')
Collection Date: 10/11/2012 12:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Arsenic	2.4	1.3	5.0	J	mg/Kg	2	10/25/2012 9:36:54 PM	4498
Barium	190	0.61	1.0		mg/Kg	10	11/2/2012 7:35:01 AM	4498
Beryllium	0.97	0.019	0.30		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Chromium	10	0.24	0.60		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Cobalt	4.9	0.14	0.60		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Iron	17000	370	500		mg/Kg	500	11/2/2012 7:37:27 AM	4498
Lead	2.8	0.44	0.50		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Manganese	330	0.21	1.0		mg/Kg	10	11/2/2012 7:35:01 AM	4498
Nickel	8.6	0.33	1.0		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Vanadium	17	0.11	5.0		mg/Kg	2	10/25/2012 9:36:54 PM	4498
Zinc	16	2.0	5.0		mg/Kg	2	10/25/2012 9:36:54 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-005C

Client Sample ID: SWMU 1-20 (10-12')
Collection Date: 10/11/2012 1:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Arsenic	2.1	1.3	5.0	J	mg/Kg	2	10/25/2012 9:45:32 PM	4498
Barium	1100	3.0	5.0		mg/Kg	50	11/2/2012 9:59:37 AM	4498
Beryllium	1.0	0.019	0.30		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Chromium	12	0.24	0.60		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Cobalt	5.8	0.14	0.60		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Iron	18000	370	500		mg/Kg	500	11/2/2012 7:42:48 AM	4498
Lead	1.5	0.44	0.50		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Manganese	540	0.42	2.0		mg/Kg	20	11/2/2012 7:40:21 AM	4498
Nickel	12	0.33	1.0		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Vanadium	21	0.11	5.0		mg/Kg	2	10/25/2012 9:45:32 PM	4498
Zinc	24	2.0	5.0		mg/Kg	2	10/25/2012 9:45:32 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-006C

Client Sample ID: SWMU 1-38 (0-0.5')
Collection Date: 10/11/2012 2:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Arsenic	1.7	1.3	5.0	J	mg/Kg	2	10/25/2012 9:51:21 PM	4498
Barium	360	1.2	2.0		mg/Kg	20	11/2/2012 7:45:41 AM	4498
Beryllium	0.70	0.019	0.30		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Chromium	24	0.24	0.60		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Cobalt	3.9	0.14	0.60		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Iron	14000	370	500		mg/Kg	500	11/2/2012 7:58:27 AM	4498
Lead	2.8	0.44	0.50		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Manganese	480	0.42	2.0		mg/Kg	20	11/2/2012 7:45:41 AM	4498
Nickel	7.7	0.33	1.0		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Vanadium	17	0.11	5.0		mg/Kg	2	10/25/2012 9:51:21 PM	4498
Zinc	34	2.0	5.0		mg/Kg	2	10/25/2012 9:51:21 PM	4498

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

Qualifiers:

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

Analytical Report
Lab Order: **1210692**
Date Reported: **11/26/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-007C

Client Sample ID: SWMU 1-38 (1.5-2')
Collection Date: 10/11/2012 2:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Arsenic	1.9	1.3	5.0	J	mg/Kg	2	10/25/2012 10:07:42 PM	4498
Barium	81	0.12	0.20		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Beryllium	0.84	0.019	0.30		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Chromium	12	0.24	0.60		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Cobalt	4.9	0.14	0.60		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Iron	20000	370	500		mg/Kg	500	11/2/2012 8:03:45 AM	4498
Lead	3.2	0.44	0.50		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Manganese	600	0.42	2.0		mg/Kg	20	11/2/2012 8:01:20 AM	4498
Nickel	8.5	0.33	1.0		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Vanadium	30	0.11	5.0		mg/Kg	2	10/25/2012 10:07:42 PM	4498
Zinc	18	2.0	5.0		mg/Kg	2	10/25/2012 10:07:42 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-008C

Client Sample ID: SWMU 1-38 (6-8')
Collection Date: 10/11/2012 2:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Arsenic	2.2	1.3	5.0	J	mg/Kg	2	10/25/2012 10:15:17 PM	4498
Barium	540	1.2	2.0		mg/Kg	20	11/2/2012 8:06:38 AM	4498
Beryllium	0.90	0.019	0.30		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Chromium	12	0.24	0.60		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Cobalt	5.2	0.14	0.60		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Iron	22000	370	500		mg/Kg	500	11/2/2012 8:09:03 AM	4498
Lead	ND	0.44	0.50		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Manganese	570	0.42	2.0		mg/Kg	20	11/2/2012 8:06:38 AM	4498
Nickel	11	0.33	1.0		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Vanadium	26	0.11	5.0		mg/Kg	2	10/25/2012 10:15:17 PM	4498
Zinc	22	2.0	5.0		mg/Kg	2	10/25/2012 10:15:17 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-009C

Client Sample ID: SWMU 1-27 (0-0.5')
Collection Date: 10/12/2012 9:00:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Arsenic	3.5	1.3	5.0	J	mg/Kg	2	10/25/2012 10:21:12 PM	4498
Barium	560	1.2	2.0		mg/Kg	20	11/2/2012 8:11:40 AM	4498
Beryllium	0.60	0.019	0.30		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Chromium	8.0	0.24	0.60		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Cobalt	2.9	0.14	0.60		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Iron	11000	370	500		mg/Kg	500	11/2/2012 8:14:06 AM	4498
Lead	1.4	0.44	0.50		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Manganese	470	0.42	2.0		mg/Kg	20	11/2/2012 8:11:40 AM	4498
Nickel	5.8	0.33	1.0		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Vanadium	17	0.11	5.0		mg/Kg	2	10/25/2012 10:21:12 PM	4498
Zinc	15	2.0	5.0		mg/Kg	2	10/25/2012 10:21:12 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-010C

Client Sample ID: SWMU 1-27 (1.5-2')
Collection Date: 10/12/2012 9:15:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	13		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Arsenic	ND	3.1	13		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Barium	750	3.0	5.0		mg/Kg	50	11/2/2012 10:02:03 AM	4498
Beryllium	0.63	0.047	0.75	J	mg/Kg	5	11/2/2012 8:17:00 AM	4498
Cadmium	ND	0.14	0.50		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Chromium	8.0	0.59	1.5		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Cobalt	4.3	0.34	1.5		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Iron	11000	370	500		mg/Kg	500	11/2/2012 10:06:05 AM	4498
Lead	2.7	1.1	1.3		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Manganese	1300	1.1	5.0		mg/Kg	50	11/2/2012 10:02:03 AM	4498
Nickel	6.0	0.83	2.5		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Selenium	ND	7.0	13		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Silver	ND	0.18	1.3		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Vanadium	20	0.28	13		mg/Kg	5	11/2/2012 8:17:00 AM	4498
Zinc	13	5.0	13		mg/Kg	5	11/2/2012 8:17:00 AM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-011C

Client Sample ID: SWMU 1-28 (0-0.5')
Collection Date: 10/12/2012 9:50:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Arsenic	2.9	1.3	5.0	J	mg/Kg	2	10/25/2012 10:32:52 PM	4498
Barium	490	1.2	2.0		mg/Kg	20	11/2/2012 8:19:27 AM	4498
Beryllium	0.70	0.019	0.30		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Chromium	10	0.24	0.60		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Cobalt	3.7	0.14	0.60		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Iron	13000	370	500		mg/Kg	500	11/2/2012 8:24:30 AM	4498
Lead	2.6	0.44	0.50		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Manganese	520	0.42	2.0		mg/Kg	20	11/2/2012 8:19:27 AM	4498
Nickel	7.1	0.33	1.0		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Vanadium	18	0.11	5.0		mg/Kg	2	10/25/2012 10:32:52 PM	4498
Zinc	19	2.0	5.0		mg/Kg	2	10/25/2012 10:32:52 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-012C

Client Sample ID: SWMU 1-28 (1.5-2')
Collection Date: 10/12/2012 10:10:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Arsenic	2.0	1.3	5.0	J	mg/Kg	2	10/25/2012 10:48:56 PM	4498
Barium	570	1.2	2.0		mg/Kg	20	11/2/2012 8:36:09 AM	4498
Beryllium	0.41	0.019	0.30		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Chromium	5.2	0.24	0.60		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Cobalt	2.7	0.14	0.60		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Iron	8800	370	500		mg/Kg	500	11/2/2012 8:38:33 AM	4498
Lead	1.4	0.44	0.50		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Manganese	430	0.42	2.0		mg/Kg	20	11/2/2012 8:36:09 AM	4498
Nickel	3.7	0.33	1.0		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Vanadium	12	0.11	5.0		mg/Kg	2	10/25/2012 10:48:56 PM	4498
Zinc	8.8	2.0	5.0		mg/Kg	2	10/25/2012 10:48:56 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-013C

Client Sample ID: SWMU 1-28 (1.5-2') DUP
Collection Date: 10/12/2012 10:10:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	12		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Arsenic	ND	3.1	12		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Barium	630	1.2	2.0		mg/Kg	20	11/2/2012 10:08:56 AM	4498
Beryllium	0.56	0.046	0.75	J	mg/Kg	5	11/2/2012 8:41:27 AM	4498
Cadmium	ND	0.14	0.50		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Chromium	6.0	0.59	1.5		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Cobalt	4.1	0.34	1.5		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Iron	10000	370	500		mg/Kg	500	11/2/2012 10:11:20 AM	4498
Lead	3.1	1.1	1.2		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Manganese	680	0.42	2.0		mg/Kg	20	11/2/2012 10:08:56 AM	4498
Nickel	4.8	0.83	2.5		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Selenium	ND	7.0	12		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Silver	ND	0.18	1.2		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Vanadium	22	0.28	12		mg/Kg	5	11/2/2012 8:41:27 AM	4498
Zinc	12	5.0	12	J	mg/Kg	5	11/2/2012 8:41:27 AM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-014C

Client Sample ID: SWMU 1-30 (0-0.5')
Collection Date: 10/12/2012 11:40:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Arsenic	2.0	1.3	5.0	J	mg/Kg	2	10/25/2012 11:16:17 PM	4498
Barium	580	1.2	2.0		mg/Kg	20	11/2/2012 8:51:14 AM	4498
Beryllium	0.69	0.019	0.30		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Chromium	13	0.24	0.60		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Cobalt	4.0	0.14	0.60		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Iron	14000	370	500		mg/Kg	500	11/2/2012 8:53:39 AM	4498
Lead	3.7	0.44	0.50		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Manganese	550	0.42	2.0		mg/Kg	20	11/2/2012 8:51:14 AM	4498
Nickel	7.3	0.33	1.0		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Vanadium	21	0.11	5.0		mg/Kg	2	10/25/2012 11:16:17 PM	4498
Zinc	26	2.0	5.0		mg/Kg	2	10/25/2012 11:16:17 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-015C

Client Sample ID: SWMU 1-30 (1.5-2')
Collection Date: 10/12/2012 12:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Arsenic	1.5	1.3	5.0	J	mg/Kg	2	10/25/2012 11:32:24 PM	4498
Barium	610	1.2	2.0		mg/Kg	20	11/2/2012 8:58:09 AM	4498
Beryllium	0.67	0.019	0.30		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Chromium	12	0.24	0.60		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Cobalt	3.8	0.14	0.60		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Iron	14000	370	500		mg/Kg	500	11/2/2012 9:00:35 AM	4498
Lead	3.1	0.44	0.50		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Manganese	530	0.42	2.0		mg/Kg	20	11/2/2012 8:58:09 AM	4498
Nickel	6.9	0.33	1.0		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Vanadium	17	0.11	5.0		mg/Kg	2	10/25/2012 11:32:24 PM	4498
Zinc	19	2.0	5.0		mg/Kg	2	10/25/2012 11:32:24 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-016C

Client Sample ID: SWMU 1-30 (4-6')
Collection Date: 10/12/2012 12:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Arsenic	1.8	1.3	5.0	J	mg/Kg	2	10/25/2012 11:38:10 PM	4498
Barium	870	1.2	2.0		mg/Kg	20	11/2/2012 9:12:14 AM	4498
Beryllium	0.47	0.019	0.30		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Chromium	7.5	0.24	0.60		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Cobalt	3.1	0.14	0.60		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Iron	12000	370	500		mg/Kg	500	11/2/2012 9:14:39 AM	4498
Lead	3.3	0.44	0.50		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Manganese	840	0.42	2.0		mg/Kg	20	11/2/2012 9:12:14 AM	4498
Nickel	4.7	0.33	1.0		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Vanadium	16	0.11	5.0		mg/Kg	2	10/25/2012 11:38:10 PM	4498
Zinc	10	2.0	5.0		mg/Kg	2	10/25/2012 11:38:10 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-017C

Client Sample ID: SWMU 1-35 (0-0.5')
Collection Date: 10/12/2012 12:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Arsenic	2.1	1.3	5.0	J	mg/Kg	2	10/25/2012 11:43:54 PM	4498
Barium	610	1.2	2.0		mg/Kg	20	11/2/2012 9:17:31 AM	4498
Beryllium	0.67	0.019	0.30		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Chromium	14	0.24	0.60		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Cobalt	3.9	0.14	0.60		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Iron	13000	370	500		mg/Kg	500	11/2/2012 9:19:57 AM	4498
Lead	2.6	0.44	0.50		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Manganese	500	0.42	2.0		mg/Kg	20	11/2/2012 9:17:31 AM	4498
Nickel	10	0.33	1.0		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Vanadium	26	0.11	5.0		mg/Kg	2	10/25/2012 11:43:54 PM	4498
Zinc	23	2.0	5.0		mg/Kg	2	10/25/2012 11:43:54 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-018C

Client Sample ID: SWMU 1-35 (1.5-2')
Collection Date: 10/12/2012 1:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Arsenic	3.4	1.3	5.0	J	mg/Kg	2	10/25/2012 11:49:40 PM	4498
Barium	1200	3.0	5.0		mg/Kg	50	11/2/2012 10:14:10 AM	4498
Beryllium	0.46	0.019	0.30		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Chromium	11	0.24	0.60		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Cobalt	3.4	0.14	0.60		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Iron	10000	370	500		mg/Kg	500	11/2/2012 9:25:14 AM	4498
Lead	2.3	0.44	0.50		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Manganese	820	0.42	2.0		mg/Kg	20	11/2/2012 9:22:48 AM	4498
Nickel	9.0	0.33	1.0		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Vanadium	19	0.11	5.0		mg/Kg	2	10/25/2012 11:49:40 PM	4498
Zinc	22	2.0	5.0		mg/Kg	2	10/25/2012 11:49:40 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-019C

Client Sample ID: SWMU 1-35 (4-6')
Collection Date: 10/12/2012 1:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Arsenic	2.3	1.3	5.0	J	mg/Kg	2	10/25/2012 11:57:27 PM	4498
Barium	440	1.2	2.0		mg/Kg	20	11/2/2012 9:28:08 AM	4498
Beryllium	0.67	0.019	0.30		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Chromium	9.8	0.24	0.60		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Cobalt	3.6	0.14	0.60		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Iron	16000	370	500		mg/Kg	500	11/2/2012 9:32:13 AM	4498
Lead	3.3	0.44	0.50		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Manganese	770	0.42	2.0		mg/Kg	20	11/2/2012 9:28:08 AM	4498
Nickel	6.2	0.33	1.0		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Vanadium	25	0.11	5.0		mg/Kg	2	10/25/2012 11:57:27 PM	4498
Zinc	12	2.0	5.0		mg/Kg	2	10/25/2012 11:57:27 PM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-021C

Client Sample ID: SWMU 1-13 (0-0.5')
Collection Date: 10/12/2012 2:05:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Arsenic	2.5	1.3	5.0	J	mg/Kg	2	10/26/2012 12:11:53 AM	4498
Barium	600	1.2	2.0		mg/Kg	20	11/2/2012 9:35:04 AM	4498
Beryllium	0.56	0.019	0.30		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Cadmium	ND	0.054	0.20		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Chromium	11	0.24	0.60		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Cobalt	3.6	0.14	0.60		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Iron	13000	370	500		mg/Kg	500	11/2/2012 9:37:29 AM	4498
Lead	3.5	0.44	0.50		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Manganese	590	0.42	2.0		mg/Kg	20	11/2/2012 9:35:04 AM	4498
Nickel	6.3	0.33	1.0		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Selenium	ND	2.8	5.0		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Silver	ND	0.071	0.50		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Vanadium	18	0.11	5.0		mg/Kg	2	10/26/2012 12:11:53 AM	4498
Zinc	30	2.0	5.0		mg/Kg	2	10/26/2012 12:11:53 AM	4498

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-022C

Client Sample ID: SWMU 1-13 (1.5-2')
Collection Date: 10/12/2012 2:25:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Barium	310	0.61	1.0		mg/Kg	10	11/2/2012 2:53:36 PM	4499
Beryllium	0.74	0.019	0.30		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Chromium	7.1	0.24	0.60		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Cobalt	3.8	0.14	0.60		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Iron	10000	370	500		mg/Kg	500	11/2/2012 2:56:03 PM	4499
Lead	3.7	0.44	0.50		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Manganese	510	0.42	2.0		mg/Kg	20	11/2/2012 3:30:43 PM	4499
Nickel	6.1	0.33	1.0		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Vanadium	15	0.11	5.0		mg/Kg	2	11/2/2012 10:27:47 AM	4499
Zinc	13	2.0	5.0		mg/Kg	2	11/2/2012 10:27:47 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-023C

Client Sample ID: SWMU 1-13 (2-4')
Collection Date: 10/12/2012 2:35:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Barium	250	0.61	1.0		mg/Kg	10	11/2/2012 3:00:37 PM	4499
Beryllium	0.60	0.019	0.30		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Chromium	22	0.24	0.60		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Cobalt	4.3	0.14	0.60		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Iron	11000	370	500		mg/Kg	500	11/2/2012 3:03:01 PM	4499
Lead	4.2	0.44	0.50		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Manganese	250	0.21	1.0		mg/Kg	10	11/2/2012 3:00:37 PM	4499
Nickel	7.0	0.33	1.0		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Vanadium	18	0.11	5.0		mg/Kg	2	11/2/2012 10:30:13 AM	4499
Zinc	29	2.0	5.0		mg/Kg	2	11/2/2012 10:30:13 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-024C

Client Sample ID: SWMU 1-13 (4-6')
Collection Date: 10/12/2012 3:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Barium	120	0.61	1.0		mg/Kg	10	11/2/2012 3:05:52 PM	4499
Beryllium	0.71	0.019	0.30		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Chromium	7.8	0.24	0.60		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Cobalt	4.1	0.14	0.60		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Iron	11000	370	500		mg/Kg	500	11/2/2012 3:08:17 PM	4499
Lead	2.5	0.44	0.50		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Manganese	320	0.21	1.0		mg/Kg	10	11/2/2012 3:05:52 PM	4499
Nickel	6.6	0.33	1.0		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Vanadium	17	0.11	5.0		mg/Kg	2	11/2/2012 10:32:38 AM	4499
Zinc	14	2.0	5.0		mg/Kg	2	11/2/2012 10:32:38 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210692-025C

Client Sample ID: SWMU 1-13 (4-6') DUP
Collection Date: 10/12/2012 3:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Barium	290	0.61	1.0		mg/Kg	10	11/2/2012 3:11:09 PM	4499
Beryllium	0.68	0.019	0.30		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Chromium	7.3	0.24	0.60		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Cobalt	4.0	0.14	0.60		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Iron	11000	370	500		mg/Kg	500	11/2/2012 3:13:34 PM	4499
Lead	3.0	0.44	0.50		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Manganese	310	0.21	1.0		mg/Kg	10	11/2/2012 3:11:09 PM	4499
Nickel	6.5	0.33	1.0		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Vanadium	16	0.11	5.0		mg/Kg	2	11/2/2012 10:35:02 AM	4499
Zinc	14	2.0	5.0		mg/Kg	2	11/2/2012 10:35:02 AM	4499

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

Qualifiers:

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

Analytical Report
Lab Order: **1210811**
Date Reported: **11/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-001C

Client Sample ID: SWMU 1-9 (0-0.5')
Collection Date: 10/15/2012 10:55:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Arsenic	2.2	1.3	5.0	J	mg/Kg	2	11/2/2012 10:39:08 AM	4499
Barium	620	1.2	2.0		mg/Kg	20	11/2/2012 3:25:22 PM	4499
Beryllium	0.71	0.019	0.30		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Chromium	24	0.24	0.60		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Cobalt	5.0	0.14	0.60		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Iron	12000	370	500		mg/Kg	500	11/2/2012 3:27:50 PM	4499
Lead	7.0	0.44	0.50		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Manganese	600	0.42	2.0		mg/Kg	20	11/2/2012 3:25:22 PM	4499
Nickel	15	0.33	1.0		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Vanadium	21	0.11	5.0		mg/Kg	2	11/2/2012 10:39:08 AM	4499
Zinc	53	2.0	5.0		mg/Kg	2	11/2/2012 10:39:08 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-002C

Client Sample ID: SWMU 1-9 (1.5-2')
Collection Date: 10/15/2012 11:05:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Barium	200	0.61	1.0		mg/Kg	10	11/2/2012 3:34:47 PM	4499
Beryllium	0.84	0.019	0.30		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Chromium	8.7	0.24	0.60		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Cobalt	4.3	0.14	0.60		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Iron	12000	370	500		mg/Kg	500	11/2/2012 3:37:14 PM	4499
Lead	2.7	0.44	0.50		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Manganese	300	0.21	1.0		mg/Kg	10	11/2/2012 3:34:47 PM	4499
Nickel	7.1	0.33	1.0		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Vanadium	16	0.11	5.0		mg/Kg	2	11/2/2012 10:41:39 AM	4499
Zinc	14	2.0	5.0		mg/Kg	2	11/2/2012 10:41:39 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-003C

Client Sample ID: SWMU 1-10 (0-0.5')
Collection Date: 10/15/2012 11:20:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Arsenic	2.9	1.3	5.0	J	mg/Kg	2	11/2/2012 10:44:04 AM	4499
Barium	590	1.2	2.0		mg/Kg	20	11/2/2012 3:40:07 PM	4499
Beryllium	0.65	0.019	0.30		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Chromium	24	0.24	0.60		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Cobalt	5.0	0.14	0.60		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Iron	14000	370	500		mg/Kg	500	11/2/2012 3:42:33 PM	4499
Lead	9.1	0.44	0.50		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Manganese	560	0.42	2.0		mg/Kg	20	11/2/2012 3:40:07 PM	4499
Nickel	14	0.33	1.0		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Vanadium	24	0.11	5.0		mg/Kg	2	11/2/2012 10:44:04 AM	4499
Zinc	70	2.0	5.0		mg/Kg	2	11/2/2012 10:44:04 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-004C

Client Sample ID: SWMU 1-10 (1.5-2')
Collection Date: 10/15/2012 11:30:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Arsenic	3.3	1.3	5.0	J	mg/Kg	2	11/2/2012 10:46:49 AM	4499
Barium	580	1.2	2.0		mg/Kg	20	11/2/2012 3:45:28 PM	4499
Beryllium	0.54	0.019	0.30		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Chromium	15	0.24	0.60		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Cobalt	4.2	0.14	0.60		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Iron	7400	370	500		mg/Kg	500	11/2/2012 3:47:54 PM	4499
Lead	3.0	0.44	0.50		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Manganese	790	0.42	2.0		mg/Kg	20	11/2/2012 3:45:28 PM	4499
Nickel	11	0.33	1.0		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Vanadium	22	0.11	5.0		mg/Kg	2	11/2/2012 10:46:49 AM	4499
Zinc	26	2.0	5.0		mg/Kg	2	11/2/2012 10:46:49 AM	4499

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

Qualifiers:

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

Analytical Report
Lab Order: **1210811**
Date Reported: **11/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-005C

Client Sample ID: SWMU 1-11 (0-0.5')
Collection Date: 10/15/2012 12:05:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Arsenic	2.0	1.3	5.0	J	mg/Kg	2	11/2/2012 10:49:22 AM	4499
Barium	510	1.2	2.0		mg/Kg	20	11/2/2012 3:50:46 PM	4499
Beryllium	0.77	0.019	0.30		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Chromium	15	0.24	0.60		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Cobalt	5.4	0.14	0.60		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Iron	14000	370	500		mg/Kg	500	11/2/2012 4:02:06 PM	4499
Lead	3.5	0.44	0.50		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Manganese	620	0.42	2.0		mg/Kg	20	11/2/2012 3:50:46 PM	4499
Nickel	8.8	0.33	1.0		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Vanadium	25	0.11	5.0		mg/Kg	2	11/2/2012 10:49:22 AM	4499
Zinc	39	2.0	5.0		mg/Kg	2	11/2/2012 10:49:22 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-006C

Client Sample ID: SWMU 1-11 (1.5-2')
Collection Date: 10/15/2012 12:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Arsenic	2.8	1.3	5.0	J	mg/Kg	2	11/2/2012 11:00:53 AM	4499
Barium	590	1.2	2.0		mg/Kg	20	11/2/2012 4:05:01 PM	4499
Beryllium	0.61	0.019	0.30		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Chromium	12	0.24	0.60		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Cobalt	4.0	0.14	0.60		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Iron	7400	370	500		mg/Kg	500	11/2/2012 4:09:11 PM	4499
Lead	1.4	0.44	0.50		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Manganese	400	0.42	2.0		mg/Kg	20	11/2/2012 4:05:01 PM	4499
Nickel	7.1	0.33	1.0		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Vanadium	18	0.11	5.0		mg/Kg	2	11/2/2012 11:00:53 AM	4499
Zinc	44	2.0	5.0		mg/Kg	2	11/2/2012 11:00:53 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-007C

Client Sample ID: SWMU 1-12 (0-0.5')
Collection Date: 10/15/2012 2:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Arsenic	2.6	1.3	5.0	J	mg/Kg	2	11/2/2012 11:03:20 AM	4499
Barium	400	0.61	1.0		mg/Kg	10	11/2/2012 4:12:04 PM	4499
Beryllium	0.95	0.019	0.30		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Chromium	15	0.24	0.60		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Cobalt	5.4	0.14	0.60		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Iron	15000	370	500		mg/Kg	500	11/2/2012 4:14:29 PM	4499
Lead	1.6	0.44	0.50		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Manganese	390	0.21	1.0		mg/Kg	10	11/2/2012 4:12:04 PM	4499
Nickel	9.9	0.33	1.0		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Vanadium	24	0.11	5.0		mg/Kg	2	11/2/2012 11:03:20 AM	4499
Zinc	61	2.0	5.0		mg/Kg	2	11/2/2012 11:03:20 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-008C

Client Sample ID: SWMU 1-12 (0.5-1')
Collection Date: 10/15/2012 3:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Arsenic	2.4	1.3	5.0	J	mg/Kg	2	11/2/2012 11:05:49 AM	4499
Barium	440	0.61	1.0		mg/Kg	10	11/2/2012 4:17:23 PM	4499
Beryllium	0.76	0.019	0.30		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Chromium	14	0.24	0.60		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Cobalt	4.9	0.14	0.60		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Iron	13000	370	500		mg/Kg	500	11/2/2012 4:19:48 PM	4499
Lead	1.6	0.44	0.50		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Manganese	460	0.21	1.0		mg/Kg	10	11/2/2012 4:17:23 PM	4499
Nickel	8.0	0.33	1.0		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Vanadium	24	0.11	5.0		mg/Kg	2	11/2/2012 11:05:49 AM	4499
Zinc	40	2.0	5.0		mg/Kg	2	11/2/2012 11:05:49 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-009C

Client Sample ID: SWMU 1-14 (0-0.5')
Collection Date: 10/15/2012 3:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Barium	530	1.2	2.0		mg/Kg	20	11/2/2012 4:25:06 PM	4499
Beryllium	1.0	0.019	0.30		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Chromium	11	0.24	0.60		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Cobalt	5.4	0.14	0.60		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Iron	14000	370	500		mg/Kg	500	11/2/2012 4:27:31 PM	4499
Lead	1.9	0.44	0.50		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Manganese	300	0.21	1.0		mg/Kg	10	11/2/2012 4:22:41 PM	4499
Nickel	8.9	0.33	1.0		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Vanadium	20	0.11	5.0		mg/Kg	2	11/2/2012 11:08:19 AM	4499
Zinc	33	2.0	5.0		mg/Kg	2	11/2/2012 11:08:19 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-010C

Client Sample ID: SWMU 1-14 (1.5-2')
Collection Date: 10/15/2012 3:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	13		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Arsenic	ND	3.1	13		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Barium	360	1.2	2.0		mg/Kg	20	11/2/2012 4:45:54 PM	4499
Beryllium	0.75	0.047	0.75		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Cadmium	ND	0.14	0.50		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Chromium	11	0.59	1.5		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Cobalt	4.4	0.34	1.5		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Iron	13000	370	500		mg/Kg	500	11/2/2012 4:48:20 PM	4499
Lead	4.1	1.1	1.3		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Manganese	430	0.42	2.0		mg/Kg	20	11/2/2012 4:45:54 PM	4499
Nickel	7.6	0.83	2.5		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Selenium	ND	7.0	13		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Silver	ND	0.18	1.3		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Vanadium	19	0.28	13		mg/Kg	5	11/2/2012 4:43:30 PM	4499
Zinc	16	5.0	13		mg/Kg	5	11/2/2012 4:43:30 PM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-011C

Client Sample ID: SWMU 1-14 (1.5-2') DUP
Collection Date: 10/15/2012 3:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Barium	240	0.61	1.0		mg/Kg	10	11/2/2012 4:51:10 PM	4499
Beryllium	0.81	0.019	0.30		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Chromium	11	0.24	0.60		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Cobalt	5.0	0.14	0.60		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Iron	15000	370	500		mg/Kg	500	11/2/2012 4:53:33 PM	4499
Lead	1.0	0.44	0.50		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Manganese	350	0.21	1.0		mg/Kg	10	11/2/2012 4:51:10 PM	4499
Nickel	8.3	0.33	1.0		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Vanadium	28	0.11	5.0		mg/Kg	2	11/2/2012 11:15:00 AM	4499
Zinc	21	2.0	5.0		mg/Kg	2	11/2/2012 11:15:00 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-012C

Client Sample ID: SWMU 1-15 (0-0.5')
Collection Date: 10/15/2012 4:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	13		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Arsenic	ND	3.1	13		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Barium	360	1.2	2.0		mg/Kg	20	11/2/2012 4:58:52 PM	4499
Beryllium	0.75	0.047	0.75		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Cadmium	ND	0.14	0.50		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Chromium	10	0.59	1.5		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Cobalt	4.4	0.34	1.5		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Iron	13000	370	500		mg/Kg	500	11/2/2012 5:01:17 PM	4499
Lead	3.1	1.1	1.3		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Manganese	350	0.42	2.0		mg/Kg	20	11/2/2012 4:58:52 PM	4499
Nickel	7.6	0.83	2.5		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Selenium	ND	7.0	13		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Silver	ND	0.18	1.3		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Vanadium	19	0.28	13		mg/Kg	5	11/2/2012 4:56:27 PM	4499
Zinc	18	5.0	13		mg/Kg	5	11/2/2012 4:56:27 PM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-013C

Client Sample ID: SWMU 1-15 (1.5-2')
Collection Date: 10/15/2012 4:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Barium	240	0.61	1.0		mg/Kg	10	11/2/2012 5:04:08 PM	4499
Beryllium	0.79	0.019	0.30		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Chromium	11	0.24	0.60		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Cobalt	5.3	0.14	0.60		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Iron	12000	370	500		mg/Kg	500	11/6/2012 11:53:57 AM	4499
Lead	1.4	0.44	0.50		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Manganese	400	0.21	1.0		mg/Kg	10	11/2/2012 5:04:08 PM	4499
Nickel	8.3	0.33	1.0		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Vanadium	22	0.11	5.0		mg/Kg	2	11/2/2012 11:19:59 AM	4499
Zinc	21	2.0	5.0		mg/Kg	2	11/2/2012 11:19:59 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-014C

Client Sample ID: SWMU 1-16 (0-0.5')
Collection Date: 10/15/2012 4:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Arsenic	ND	1.3	5.0		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Barium	640	1.2	2.0		mg/Kg	20	11/2/2012 5:19:54 PM	4499
Beryllium	0.46	0.019	0.30		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Chromium	3.9	0.24	0.60		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Cobalt	3.0	0.14	0.60		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Iron	3400	370	500		mg/Kg	500	11/6/2012 11:56:51 AM	4499
Lead	ND	0.44	0.50		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Manganese	330	0.42	2.0		mg/Kg	20	11/2/2012 5:19:54 PM	4499
Nickel	4.6	0.33	1.0		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Vanadium	14	0.11	5.0		mg/Kg	2	11/2/2012 11:22:28 AM	4499
Zinc	14	2.0	5.0		mg/Kg	2	11/2/2012 11:22:28 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-015C

Client Sample ID: SWMU 1-16 (1.5-2')
Collection Date: 10/15/2012 5:05:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	11/6/2012 11:59:37 AM	4499
Arsenic	ND	3.1	12		mg/Kg	5	11/6/2012 11:59:37 AM	4499
Barium	290	1.2	2.0		mg/Kg	20	11/2/2012 5:27:35 PM	4499
Beryllium	0.70	0.046	0.75	J	mg/Kg	5	11/2/2012 5:25:09 PM	4499
Cadmium	ND	0.14	0.50		mg/Kg	5	11/2/2012 5:25:09 PM	4499
Chromium	9.9	0.59	1.5		mg/Kg	5	11/2/2012 5:25:09 PM	4499
Cobalt	4.2	0.34	1.5		mg/Kg	5	11/2/2012 5:25:09 PM	4499
Iron	12000	370	500		mg/Kg	500	11/6/2012 12:02:39 PM	4499
Lead	4.2	1.1	1.2		mg/Kg	5	11/2/2012 5:25:09 PM	4499
Manganese	790	0.42	2.0		mg/Kg	20	11/2/2012 5:27:35 PM	4499
Nickel	7.2	0.83	2.5		mg/Kg	5	11/2/2012 5:25:09 PM	4499
Selenium	ND	7.0	12		mg/Kg	5	11/2/2012 5:25:09 PM	4499
Silver	ND	0.18	1.2		mg/Kg	5	11/2/2012 5:25:09 PM	4499
Vanadium	18	0.28	12		mg/Kg	5	11/2/2012 5:25:09 PM	4499
Zinc	17	5.0	12		mg/Kg	5	11/6/2012 11:59:37 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-016C

Client Sample ID: SWMU 1-17 (0-0.5')
Collection Date: 10/15/2012 5:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	1.3	5.0		mg/Kg	2	11/27/2012 10:08:12 AM	4499
Arsenic	4.7	1.3	5.0	J	mg/Kg	2	11/27/2012 10:08:12 AM	4499
Barium	500	1.2	2.0		mg/Kg	20	11/2/2012 5:40:07 PM	4499
Beryllium	0.67	0.019	0.30		mg/Kg	2	11/2/2012 11:37:29 AM	4499
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 11:37:29 AM	4499
Chromium	6.6	0.24	0.60		mg/Kg	2	11/2/2012 11:37:29 AM	4499
Cobalt	4.1	0.14	0.60		mg/Kg	2	11/2/2012 11:37:29 AM	4499
Iron	8200	370	500		mg/Kg	500	11/6/2012 2:17:39 PM	4499
Lead	0.82	0.44	0.50		mg/Kg	2	11/2/2012 11:37:29 AM	4499
Manganese	360	0.42	2.0		mg/Kg	20	11/2/2012 5:40:07 PM	4499
Nickel	6.4	0.33	1.0		mg/Kg	2	11/2/2012 11:37:29 AM	4499
Selenium	ND	2.8	5.0		mg/Kg	2	11/27/2012 10:08:12 AM	4499
Silver	ND	0.071	0.50		mg/Kg	2	11/2/2012 11:37:29 AM	4499
Vanadium	19	0.11	5.0		mg/Kg	2	11/2/2012 11:37:29 AM	4499
Zinc	15	2.0	5.0		mg/Kg	2	11/2/2012 11:37:29 AM	4499

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210811-017C

Client Sample ID: SWMU 1-17 (1-1.5')
Collection Date: 10/15/2012 5:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	1.3	5.0		mg/Kg	2	11/6/2012 12:24:33 PM	4583
Arsenic	ND	1.3	5.0		mg/Kg	2	11/6/2012 2:00:22 PM	4583
Barium	310	1.2	2.0		mg/Kg	20	11/2/2012 6:05:26 PM	4583
Beryllium	0.78	0.019	0.30		mg/Kg	2	11/2/2012 6:02:58 PM	4583
Cadmium	ND	0.054	0.20		mg/Kg	2	11/2/2012 6:02:58 PM	4583
Chromium	8.8	0.24	0.60		mg/Kg	2	11/2/2012 6:02:58 PM	4583
Cobalt	4.1	0.14	0.60		mg/Kg	2	11/2/2012 6:02:58 PM	4583
Iron	11000	370	500		mg/Kg	500	11/6/2012 2:20:27 PM	4583
Lead	3.5	0.44	0.50		mg/Kg	2	11/2/2012 6:02:58 PM	4583
Manganese	340	0.42	2.0		mg/Kg	20	11/2/2012 6:05:26 PM	4583
Nickel	7.2	0.33	1.0		mg/Kg	2	11/2/2012 6:02:58 PM	4583
Selenium	ND	2.8	5.0		mg/Kg	2	11/2/2012 6:02:58 PM	4583
Silver	0.18	0.071	0.50	J	mg/Kg	2	11/13/2012 5:30:19 AM	4745
Vanadium	13	0.11	5.0		mg/Kg	2	11/2/2012 6:02:58 PM	4583
Zinc	15	2.0	5.0		mg/Kg	2	11/6/2012 12:24:33 PM	4583

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

Qualifiers:

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

Analytical Report
Lab Order: **1210856**
Date Reported: **11/26/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210856-001C

Client Sample ID: SWMU 1-31 (0-0.5')
Collection Date: 10/16/2012 3:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Arsenic	3.5	1.3	5.0	J	mg/Kg	2	10/25/2012 11:38:41 AM	4440
Barium	350	0.61	1.0		mg/Kg	10	10/25/2012 1:29:20 PM	4440
Beryllium	0.56	0.019	0.30		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Chromium	12	0.24	0.60		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Cobalt	3.8	0.14	0.60		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Iron	13000	370	500		mg/Kg	500	11/2/2012 6:51:37 AM	4440
Lead	5.2	0.44	0.50		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Manganese	420	0.21	1.0		mg/Kg	10	10/25/2012 1:29:20 PM	4440
Nickel	8.0	0.33	1.0		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/29/2012 3:19:29 PM	4440
Vanadium	19	0.11	5.0		mg/Kg	2	10/25/2012 11:38:41 AM	4440
Zinc	30	2.0	5.0		mg/Kg	2	10/25/2012 11:38:41 AM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210856-002C

Client Sample ID: SWMU 1-32 (0-0.5')
Collection Date: 10/16/2012 3:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Arsenic	3.1	1.3	5.0	J	mg/Kg	2	10/25/2012 11:43:44 AM	4440
Barium	600	1.2	2.0		mg/Kg	20	10/25/2012 2:44:01 PM	4440
Beryllium	0.64	0.019	0.30		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Chromium	17	0.24	0.60		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Cobalt	4.0	0.14	0.60		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Iron	14000	370	500		mg/Kg	500	11/2/2012 6:54:30 AM	4440
Lead	6.3	0.44	0.50		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Manganese	440	0.21	1.0		mg/Kg	10	10/25/2012 1:34:12 PM	4440
Nickel	13	0.33	1.0		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Silver	ND	0.035	0.25		mg/Kg	1	10/29/2012 3:24:30 PM	4440
Vanadium	22	0.11	5.0		mg/Kg	2	10/25/2012 11:43:44 AM	4440
Zinc	36	2.0	5.0		mg/Kg	2	10/25/2012 11:43:44 AM	4440

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

Qualifiers:

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

Analytical Report
Lab Order: **1210856**
Date Reported: **11/26/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210856-003C

Client Sample ID: SWMU 1-32 (0-0.5') DUP
Collection Date: 10/16/2012 3:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Arsenic	2.5	1.3	5.0	J	mg/Kg	2	10/25/2012 11:50:31 AM	4440
Barium	580	1.2	2.0		mg/Kg	20	10/25/2012 2:48:50 PM	4440
Beryllium	0.66	0.019	0.30		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Chromium	21	0.24	0.60		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Cobalt	5.1	0.14	0.60		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Iron	19000	370	500		mg/Kg	500	11/2/2012 6:57:23 AM	4440
Lead	8.0	0.44	0.50		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Manganese	540	0.42	2.0		mg/Kg	20	10/25/2012 2:48:50 PM	4440
Nickel	16	0.33	1.0		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/29/2012 3:41:51 PM	4440
Vanadium	28	0.11	5.0		mg/Kg	2	10/25/2012 11:50:31 AM	4440
Zinc	43	2.0	5.0		mg/Kg	2	10/25/2012 11:50:31 AM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210856-004C

Client Sample ID: SWMU 1-33 (0-0.5')
Collection Date: 10/16/2012 4:03:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Arsenic	2.3	1.3	5.0	J	mg/Kg	2	10/25/2012 11:55:53 AM	4440
Barium	680	1.2	2.0		mg/Kg	20	10/25/2012 1:52:47 PM	4440
Beryllium	0.64	0.019	0.30		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Chromium	12	0.24	0.60		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Cobalt	3.2	0.14	0.60		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Iron	13000	370	500		mg/Kg	500	11/2/2012 7:00:17 AM	4440
Lead	3.7	0.44	0.50		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Manganese	800	0.42	2.0		mg/Kg	20	10/25/2012 1:52:47 PM	4440
Nickel	8.9	0.33	1.0		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Silver	ND	0.035	0.25		mg/Kg	1	10/29/2012 3:47:14 PM	4440
Vanadium	19	0.11	5.0		mg/Kg	2	10/25/2012 11:55:53 AM	4440
Zinc	23	2.0	5.0		mg/Kg	2	10/25/2012 11:55:53 AM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210856-005C

Client Sample ID: SWMU 1-34 (0-0.5')
Collection Date: 10/16/2012 4:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Arsenic	2.9	1.3	5.0	J	mg/Kg	2	10/25/2012 12:09:46 PM	4440
Barium	740	1.2	2.0		mg/Kg	20	10/25/2012 1:57:39 PM	4440
Beryllium	0.52	0.019	0.30		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Chromium	12	0.24	0.60		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Cobalt	2.7	0.14	0.60		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Iron	9800	370	500		mg/Kg	500	11/2/2012 7:03:09 AM	4440
Lead	2.5	0.44	0.50		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Manganese	520	0.42	2.0		mg/Kg	20	10/25/2012 1:57:39 PM	4440
Nickel	7.5	0.33	1.0		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Silver	ND	0.035	0.25		mg/Kg	1	10/29/2012 3:52:27 PM	4440
Vanadium	18	0.11	5.0		mg/Kg	2	10/25/2012 12:09:46 PM	4440
Zinc	28	2.0	5.0		mg/Kg	2	10/25/2012 12:09:46 PM	4440

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210856-006C

Client Sample ID: SWMU 1-36 (0-0.5')
Collection Date: 10/16/2012 5:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Arsenic	2.5	1.3	5.0	J	mg/Kg	2	10/25/2012 12:14:48 PM	4440
Barium	690	1.2	2.0		mg/Kg	20	10/25/2012 2:04:20 PM	4440
Beryllium	0.66	0.019	0.30		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Chromium	21	0.24	0.60		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Cobalt	4.3	0.14	0.60		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Iron	16000	370	500		mg/Kg	500	11/2/2012 7:06:02 AM	4440
Lead	6.8	0.44	0.50		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Manganese	580	0.42	2.0		mg/Kg	20	10/25/2012 2:04:20 PM	4440
Nickel	12	0.33	1.0		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/29/2012 3:57:34 PM	4440
Vanadium	20	0.11	5.0		mg/Kg	2	10/25/2012 12:14:48 PM	4440
Zinc	50	2.0	5.0		mg/Kg	2	10/25/2012 12:14:48 PM	4440

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

Qualifiers:

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

Analytical Report
Lab Order: **1210858**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210858-001C

Client Sample ID: SWMU 1-18 (0-0.5')
Collection Date: 10/16/2012 10:00:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Arsenic	4.9	1.3	5.0	J	mg/Kg	2	10/25/2012 4:50:20 PM	4441
Barium	700	1.2	2.0		mg/Kg	20	10/25/2012 4:53:22 PM	4441
Beryllium	0.35	0.019	0.30		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Chromium	3.4	0.24	0.60		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Cobalt	1.9	0.14	0.60		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Iron	3600	370	500		mg/Kg	500	10/25/2012 4:56:13 PM	4441
Lead	ND	0.44	0.50		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Manganese	300	0.42	2.0		mg/Kg	20	10/25/2012 4:53:22 PM	4441
Nickel	3.6	0.33	1.0		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Vanadium	11	0.11	5.0		mg/Kg	2	10/25/2012 4:50:20 PM	4441
Zinc	11	2.0	5.0		mg/Kg	2	10/25/2012 4:50:20 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210858-002C

Client Sample ID: SWMU 1-18 (1-1.5')
Collection Date: 10/16/2012 10:10:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	12		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Arsenic	ND	3.1	12		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Barium	340	1.2	2.0		mg/Kg	20	10/25/2012 5:06:32 PM	4441
Beryllium	0.64	0.046	0.75	J	mg/Kg	5	10/29/2012 4:05:34 PM	4441
Cadmium	ND	0.14	0.50		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Chromium	9.2	0.59	1.5		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Cobalt	3.8	0.34	1.5		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Iron	11000	370	500		mg/Kg	500	10/25/2012 5:20:33 PM	4441
Lead	6.1	1.1	1.2		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Manganese	1500	1.1	5.0		mg/Kg	50	10/29/2012 4:18:19 PM	4441
Nickel	6.4	0.83	2.5		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Selenium	ND	7.0	12		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Silver	ND	0.18	1.2		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Vanadium	20	0.28	12		mg/Kg	5	10/29/2012 4:05:34 PM	4441
Zinc	15	5.0	12		mg/Kg	5	10/29/2012 4:05:34 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210858-003C

Client Sample ID: SWMU 1-19 (0-0.5')
Collection Date: 10/16/2012 10:35:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Arsenic	1.6	1.3	5.0	J	mg/Kg	2	10/25/2012 5:26:14 PM	4441
Barium	530	1.2	2.0		mg/Kg	20	10/25/2012 5:29:06 PM	4441
Beryllium	0.68	0.019	0.30		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Chromium	13	0.24	0.60		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Cobalt	3.8	0.14	0.60		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Iron	13000	370	500		mg/Kg	500	10/25/2012 5:31:45 PM	4441
Lead	2.8	0.44	0.50		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Manganese	550	0.42	2.0		mg/Kg	20	10/25/2012 5:29:06 PM	4441
Nickel	6.5	0.33	1.0		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Silver	ND	0.18	1.2		mg/Kg	5	10/31/2012 1:29:43 PM	4441
Vanadium	18	0.11	5.0		mg/Kg	2	10/25/2012 5:26:14 PM	4441
Zinc	25	2.0	5.0		mg/Kg	2	10/25/2012 5:26:14 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210858-004C

Client Sample ID: SWMU 1-21 (0-0.5')
Collection Date: 10/16/2012 11:05:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Arsenic	2.1	1.3	5.0	J	mg/Kg	2	10/25/2012 5:39:12 PM	4441
Barium	440	1.2	2.0		mg/Kg	20	10/25/2012 5:42:05 PM	4441
Beryllium	0.77	0.019	0.30		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Chromium	9.9	0.24	0.60		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Cobalt	4.1	0.14	0.60		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Iron	14000	370	500		mg/Kg	500	10/25/2012 5:44:46 PM	4441
Lead	2.6	0.44	0.50		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Manganese	450	0.42	2.0		mg/Kg	20	10/25/2012 5:42:05 PM	4441
Nickel	7.5	0.33	1.0		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 1:44:15 PM	4441
Vanadium	19	0.11	5.0		mg/Kg	2	10/25/2012 5:39:12 PM	4441
Zinc	17	2.0	5.0		mg/Kg	2	10/25/2012 5:39:12 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210858-005C

Client Sample ID: SWMU 1-21 (0-0.5') DUP
Collection Date: 10/16/2012 11:05:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Arsenic	2.6	1.3	5.0	J	mg/Kg	2	10/25/2012 6:01:03 PM	4441
Barium	290	1.2	2.0		mg/Kg	20	10/25/2012 6:03:57 PM	4441
Beryllium	0.89	0.019	0.30		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Chromium	11	0.24	0.60		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Cobalt	4.5	0.14	0.60		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Iron	17000	370	500		mg/Kg	500	10/31/2012 1:51:45 PM	4441
Lead	2.3	0.44	0.50		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Manganese	470	0.42	2.0		mg/Kg	20	10/25/2012 6:03:57 PM	4441
Nickel	8.4	0.33	1.0		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 1:47:07 PM	4441
Vanadium	22	0.11	5.0		mg/Kg	2	10/25/2012 6:01:03 PM	4441
Zinc	18	2.0	5.0		mg/Kg	2	10/25/2012 6:01:03 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210858-006C

Client Sample ID: SWMU 1-22 (0-0.5')
Collection Date: 10/16/2012 11:35:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Arsenic	3.5	1.3	5.0	J	mg/Kg	2	10/25/2012 6:14:12 PM	4441
Barium	590	1.2	2.0		mg/Kg	20	10/25/2012 6:17:18 PM	4441
Beryllium	0.89	0.019	0.30		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Chromium	14	0.24	0.60		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Cobalt	5.3	0.14	0.60		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Iron	22000	370	500		mg/Kg	500	10/31/2012 1:57:31 PM	4441
Lead	3.5	0.44	0.50		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Manganese	530	0.42	2.0		mg/Kg	20	10/25/2012 6:17:18 PM	4441
Nickel	8.6	0.33	1.0		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 1:54:36 PM	4441
Vanadium	27	0.11	5.0		mg/Kg	2	10/25/2012 6:14:12 PM	4441
Zinc	26	2.0	5.0		mg/Kg	2	10/25/2012 6:14:12 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210858-007C

Client Sample ID: SWMU 1-22 (1.5-2')
Collection Date: 10/16/2012 11:45:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Arsenic	1.9	1.3	5.0	J	mg/Kg	2	10/25/2012 6:25:49 PM	4441
Barium	500	1.2	2.0		mg/Kg	20	10/25/2012 6:28:40 PM	4441
Beryllium	0.69	0.019	0.30		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Chromium	9.8	0.24	0.60		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Cobalt	3.8	0.14	0.60		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Iron	14000	370	500		mg/Kg	500	10/31/2012 2:03:13 PM	4441
Lead	2.4	0.44	0.50		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Manganese	330	0.42	2.0		mg/Kg	20	10/25/2012 6:28:40 PM	4441
Nickel	6.9	0.33	1.0		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 2:00:20 PM	4441
Vanadium	18	0.11	5.0		mg/Kg	2	10/25/2012 6:25:49 PM	4441
Zinc	15	2.0	5.0		mg/Kg	2	10/25/2012 6:25:49 PM	4441

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

Qualifiers:

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

Analytical Report
Lab Order: **1210859**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210859-001C

Client Sample ID: SWMU 1-23 (0-0.5')
Collection Date: 10/16/2012 12:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Arsenic	2.7	1.3	5.0	J	mg/Kg	2	10/25/2012 6:49:19 PM	4441
Barium	670	1.2	2.0		mg/Kg	20	10/25/2012 6:52:13 PM	4441
Beryllium	0.69	0.019	0.30		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Chromium	16	0.24	0.60		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Cobalt	4.0	0.14	0.60		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Iron	14000	370	500		mg/Kg	500	10/31/2012 2:08:56 PM	4441
Lead	3.0	0.44	0.50		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Manganese	980	0.42	2.0		mg/Kg	20	10/25/2012 6:52:13 PM	4441
Nickel	7.9	0.33	1.0		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 2:06:02 PM	4441
Vanadium	19	0.11	5.0		mg/Kg	2	10/25/2012 6:49:19 PM	4441
Zinc	21	2.0	5.0		mg/Kg	2	10/25/2012 6:49:19 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210859-002C

Client Sample ID: SWMU 1-39 (0-0.5')
Collection Date: 10/16/2012 12:35:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Arsenic	ND	1.3	5.0		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Barium	450	1.2	2.0		mg/Kg	20	10/25/2012 7:03:53 PM	4441
Beryllium	0.71	0.019	0.30		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Chromium	10	0.24	0.60		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Cobalt	3.9	0.14	0.60		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Iron	18000	370	500		mg/Kg	500	10/31/2012 2:26:50 PM	4441
Lead	4.6	0.44	0.50		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Manganese	580	0.42	2.0		mg/Kg	20	10/25/2012 7:03:53 PM	4441
Nickel	6.2	0.33	1.0		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 2:11:46 PM	4441
Vanadium	25	0.11	5.0		mg/Kg	2	10/25/2012 7:00:48 PM	4441
Zinc	16	2.0	5.0		mg/Kg	2	10/25/2012 7:00:48 PM	4441

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

Qualifiers:

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

Analytical Report
Lab Order: **1210859**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210859-003C

Client Sample ID: SWMU 1-25 (0-0.5')
Collection Date: 10/16/2012 1:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Arsenic	3.7	1.3	5.0	J	mg/Kg	2	10/25/2012 7:24:44 PM	4441
Barium	370	1.2	2.0		mg/Kg	20	10/25/2012 7:27:51 PM	4441
Beryllium	0.53	0.019	0.30		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Chromium	14	0.24	0.60		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Cobalt	3.2	0.14	0.60		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Iron	11000	370	500		mg/Kg	500	10/25/2012 7:30:37 PM	4441
Lead	5.6	0.44	0.50		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Manganese	310	0.42	2.0		mg/Kg	20	10/25/2012 7:27:51 PM	4441
Nickel	8.6	0.33	1.0		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Silver	ND	0.035	0.25		mg/Kg	1	10/31/2012 2:29:39 PM	4441
Vanadium	21	0.11	5.0		mg/Kg	2	10/25/2012 7:24:44 PM	4441
Zinc	27	2.0	5.0		mg/Kg	2	10/25/2012 7:24:44 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210859-004C

Client Sample ID: SWMU 1-25 (0.5-1')
Collection Date: 10/16/2012 1:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Arsenic	3.7	1.3	5.0	J	mg/Kg	2	10/25/2012 7:36:32 PM	4441
Barium	360	1.2	2.0		mg/Kg	20	10/25/2012 7:39:34 PM	4441
Beryllium	0.45	0.019	0.30		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Chromium	12	0.24	0.60		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Cobalt	4.3	0.14	0.60		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Iron	10000	370	500		mg/Kg	500	10/25/2012 7:42:20 PM	4441
Lead	4.1	0.44	0.50		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Manganese	270	0.42	2.0		mg/Kg	20	10/25/2012 7:39:34 PM	4441
Nickel	9.8	0.33	1.0		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 2:32:45 PM	4441
Vanadium	20	0.11	5.0		mg/Kg	2	10/25/2012 7:36:32 PM	4441
Zinc	28	2.0	5.0		mg/Kg	2	10/25/2012 7:36:32 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210859-005C

Client Sample ID: SWMU 1-26 (0-0.5')
Collection Date: 10/16/2012 1:35:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Arsenic	1.5	1.3	5.0	J	mg/Kg	2	10/25/2012 7:48:02 PM	4441
Barium	390	1.2	2.0		mg/Kg	20	10/25/2012 7:50:55 PM	4441
Beryllium	0.62	0.019	0.30		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Chromium	7.9	0.24	0.60		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Cobalt	3.7	0.14	0.60		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Iron	11000	370	500		mg/Kg	500	10/25/2012 8:05:04 PM	4441
Lead	2.7	0.44	0.50		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Manganese	670	0.42	2.0		mg/Kg	20	10/25/2012 7:50:55 PM	4441
Nickel	6.1	0.33	1.0		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 2:35:55 PM	4441
Vanadium	14	0.11	5.0		mg/Kg	2	10/25/2012 7:48:02 PM	4441
Zinc	16	2.0	5.0		mg/Kg	2	10/25/2012 7:48:02 PM	4441

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.1
Lab ID: 1210859-006C

Client Sample ID: SWMU 1-29 (0-0.5')
Collection Date: 10/16/2012 2:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Arsenic	2.3	1.3	5.0	J	mg/Kg	2	10/25/2012 8:10:53 PM	4441
Barium	550	1.2	2.0		mg/Kg	20	10/25/2012 8:13:48 PM	4441
Beryllium	0.69	0.019	0.30		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Chromium	17	0.24	0.60		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Cobalt	5.1	0.14	0.60		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Iron	15000	370	500		mg/Kg	500	10/25/2012 8:16:27 PM	4441
Lead	7.0	0.44	0.50		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Manganese	620	0.42	2.0		mg/Kg	20	10/25/2012 8:13:48 PM	4441
Nickel	9.3	0.33	1.0		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 2:38:49 PM	4441
Vanadium	19	0.11	5.0		mg/Kg	2	10/25/2012 8:10:53 PM	4441
Zinc	48	2.0	5.0		mg/Kg	2	10/25/2012 8:10:53 PM	4441

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

Qualifiers:

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

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

November 14, 2012

Scott Crouch
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210279

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 13 sample(s) on 10/4/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued October 29, 2012.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (6-8')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:00:00 AM
Lab ID: 1210279-001
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/7/2012 12:39:13 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/7/2012 12:39:13 AM
Surr: DNOP	89.9	77.6-140		%REC	1	10/7/2012 12:39:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 3:27:07 AM
Surr: BFB	102	84-116		%REC	1	10/6/2012 3:27:07 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:23:08 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	10/17/2012 10:26:45 AM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 10:26:45 AM
Barium	39	0.20		mg/Kg	2	10/17/2012 10:26:45 AM
Beryllium	0.61	0.30		mg/Kg	2	10/17/2012 10:26:45 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 10:26:45 AM
Chromium	8.1	0.60		mg/Kg	2	10/17/2012 10:26:45 AM
Cobalt	3.9	0.60		mg/Kg	2	10/17/2012 10:26:45 AM
Iron	12000	500		mg/Kg	500	10/17/2012 12:52:55 PM
Lead	3.5	0.50		mg/Kg	2	10/17/2012 10:26:45 AM
Manganese	230	0.50		mg/Kg	5	10/17/2012 12:50:30 PM
Nickel	6.0	1.0		mg/Kg	2	10/17/2012 10:26:45 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 6:37:37 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 10:26:45 AM
Vanadium	16	5.0		mg/Kg	2	10/17/2012 10:26:45 AM
Zinc	16	5.0		mg/Kg	2	10/17/2012 10:26:45 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (6-8')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:00:00 AM
Lab ID: 1210279-001
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 1:19:59 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 1:19:59 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 1:19:59 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 1:19:59 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 1:19:59 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 1:19:59 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (6-8')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:00:00 AM
Lab ID: 1210279-001
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 1:19:59 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 1:19:59 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 1:19:59 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 1:19:59 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 1:19:59 PM
Surr: 2,4,6-Tribromophenol	69.4	21.3-145		%REC	1	10/9/2012 1:19:59 PM
Surr: 2-Fluorobiphenyl	67.8	20-131		%REC	1	10/9/2012 1:19:59 PM
Surr: 2-Fluorophenol	70.2	11.9-130		%REC	1	10/9/2012 1:19:59 PM
Surr: 4-Terphenyl-d14	59.7	25.1-149		%REC	1	10/9/2012 1:19:59 PM
Surr: Nitrobenzene-d5	70.7	25.6-137		%REC	1	10/9/2012 1:19:59 PM
Surr: Phenol-d5	71.6	20.3-132		%REC	1	10/9/2012 1:19:59 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Toluene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Ethylbenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Naphthalene	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 11:09:51 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 11:09:51 AM
Acetone	ND	0.75		mg/Kg	1	10/10/2012 11:09:51 AM
Bromobenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Bromoform	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Bromomethane	ND	0.15		mg/Kg	1	10/10/2012 11:09:51 AM
2-Butanone	ND	0.50		mg/Kg	1	10/10/2012 11:09:51 AM
Carbon disulfide	ND	0.50		mg/Kg	1	10/10/2012 11:09:51 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
Chlorobenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Chloroethane	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (6-8')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:00:00 AM
Lab ID: 1210279-001
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Chloromethane	ND	0.15		mg/Kg	1	10/10/2012 11:09:51 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Dibromomethane	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
2-Hexanone	ND	0.50		mg/Kg	1	10/10/2012 11:09:51 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/10/2012 11:09:51 AM
Methylene chloride	ND	0.15		mg/Kg	1	10/10/2012 11:09:51 AM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/10/2012 11:09:51 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Styrene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (6-8')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:00:00 AM
Lab ID: 1210279-001
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.050		mg/Kg	1	10/10/2012 11:09:51 AM
Xylenes, Total	ND	0.10		mg/Kg	1	10/10/2012 11:09:51 AM
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%REC	1	10/10/2012 11:09:51 AM
Surr: 4-Bromofluorobenzene	72.3	70-130		%REC	1	10/10/2012 11:09:51 AM
Surr: Dibromofluoromethane	93.5	70-130		%REC	1	10/10/2012 11:09:51 AM
Surr: Toluene-d8	73.7	70-130		%REC	1	10/10/2012 11:09:51 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.1
Lab ID: 1210279-002 **Matrix:** SOIL

Client Sample ID: SWMU 1-2 (10-11')
Collection Date: 10/2/2012 10:20:00 AM
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/7/2012 1:04:03 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/7/2012 1:04:03 AM
Surr: DNOP	88.0	77.6-140		%REC	1	10/7/2012 1:04:03 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 3:55:52 AM
Surr: BFB	101	84-116		%REC	1	10/6/2012 3:55:52 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:25:42 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	10/17/2012 10:31:47 AM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 10:31:47 AM
Barium	220	0.50		mg/Kg	5	10/17/2012 12:55:32 PM
Beryllium	0.74	0.30		mg/Kg	2	10/17/2012 10:31:47 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 10:31:47 AM
Chromium	6.0	0.60		mg/Kg	2	10/17/2012 10:31:47 AM
Cobalt	3.3	0.60		mg/Kg	2	10/17/2012 10:31:47 AM
Iron	11000	500		mg/Kg	500	10/17/2012 12:59:38 PM
Lead	3.9	0.50		mg/Kg	2	10/17/2012 10:31:47 AM
Manganese	310	1.0		mg/Kg	10	10/23/2012 6:42:27 PM
Nickel	5.6	1.0		mg/Kg	2	10/17/2012 10:31:47 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 6:40:01 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 10:31:47 AM
Vanadium	12	5.0		mg/Kg	2	10/17/2012 10:31:47 AM
Zinc	13	5.0		mg/Kg	2	10/17/2012 10:31:47 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:20:00 AM
Lab ID: 1210279-002
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 3:20:37 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 3:20:37 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 3:20:37 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 3:20:37 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 3:20:37 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 3:20:37 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:20:00 AM
Lab ID: 1210279-002
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 3:20:37 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 3:20:37 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 3:20:37 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 3:20:37 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 3:20:37 PM
Surr: 2,4,6-Tribromophenol	63.6	21.3-145		%REC	1	10/9/2012 3:20:37 PM
Surr: 2-Fluorobiphenyl	52.6	20-131		%REC	1	10/9/2012 3:20:37 PM
Surr: 2-Fluorophenol	56.4	11.9-130		%REC	1	10/9/2012 3:20:37 PM
Surr: 4-Terphenyl-d14	54.0	25.1-149		%REC	1	10/9/2012 3:20:37 PM
Surr: Nitrobenzene-d5	57.1	25.6-137		%REC	1	10/9/2012 3:20:37 PM
Surr: Phenol-d5	61.4	20.3-132		%REC	1	10/9/2012 3:20:37 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Toluene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Ethylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Xylenes, Total	ND	0.00232		mg/Kg	1	10/8/2012 5:18:58 PM
Methyl tert-butyl ether (MTBE)	0.00148	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,2,4-Trimethylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,3,5-Trimethylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,2-Dichloroethane (EDC)	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,2-Dibromoethane (EDB)	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Naphthalene	ND	0.00232		mg/Kg	1	10/8/2012 5:18:58 PM
1-Methylnaphthalene	ND	0.00463		mg/Kg	1	10/8/2012 5:18:58 PM
2-Methylnaphthalene	ND	0.00463		mg/Kg	1	10/8/2012 5:18:58 PM
Acetone	0.0135	0.0116		mg/Kg	1	10/8/2012 5:18:58 PM
Bromobenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Bromodichloromethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Bromoform	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Bromomethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
2-Butanone	ND	0.0116		mg/Kg	1	10/8/2012 5:18:58 PM
Carbon tetrachloride	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Chlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Chloroethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:20:00 AM
Lab ID: 1210279-002
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Chloromethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
2-Chlorotoluene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Carbon disulfide	ND	0.0116		mg/Kg	1	10/8/2012 5:18:58 PM
4-Chlorotoluene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
cis-1,2-DCE	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
cis-1,3-Dichloropropene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,2-Dibromo-3-chloropropane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Dibromochloromethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Dibromomethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,2-Dichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,3-Dichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,4-Dichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Dichlorodifluoromethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,1-Dichloroethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,1-Dichloroethene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,2-Dichloropropane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,3-Dichloropropane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
2,2-Dichloropropane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,1-Dichloropropene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Hexachlorobutadiene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Isopropylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
4-Isopropyltoluene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Methylene chloride	ND	0.00347		mg/Kg	1	10/8/2012 5:18:58 PM
n-Butylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
2-Hexanone	ND	0.0116		mg/Kg	1	10/8/2012 5:18:58 PM
n-Propylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
sec-Butylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Styrene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
4-Methyl-2-pentanone	ND	0.0116		mg/Kg	1	10/8/2012 5:18:58 PM
tert-Butylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,1,1,2-Tetrachloroethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,1,2,2-Tetrachloroethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Tetrachloroethene (PCE)	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
trans-1,2-DCE	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
trans-1,3-Dichloropropene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,2,3-Trichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,2,4-Trichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,1,1-Trichloroethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
1,1,2-Trichloroethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Trichloroethene (TCE)	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Trichlorofluoromethane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:20:00 AM
Lab ID: 1210279-002
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Vinyl chloride	ND	0.00116		mg/Kg	1	10/8/2012 5:18:58 PM
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%REC	1	10/8/2012 5:18:58 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	1	10/8/2012 5:18:58 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/8/2012 5:18:58 PM
Surr: Toluene-d8	86.7	70-130		%REC	1	10/8/2012 5:18:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (14-16')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:35:00 AM
Lab ID: 1210279-003
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/7/2012 1:28:43 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/7/2012 1:28:43 AM
Surr: DNOP	92.2	77.6-140		%REC	1	10/7/2012 1:28:43 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 4:24:34 AM
Surr: BFB	101	84-116		%REC	1	10/6/2012 4:24:34 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:27:28 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	10/17/2012 10:36:49 AM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 10:36:49 AM
Barium	680	2.0		mg/Kg	20	10/23/2012 6:47:15 PM
Beryllium	0.58	0.30		mg/Kg	2	10/17/2012 10:36:49 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 10:36:49 AM
Chromium	6.3	0.60		mg/Kg	2	10/17/2012 10:36:49 AM
Cobalt	3.5	0.60		mg/Kg	2	10/17/2012 10:36:49 AM
Iron	12000	500		mg/Kg	500	10/17/2012 1:04:52 PM
Lead	3.5	0.50		mg/Kg	2	10/17/2012 10:36:49 AM
Manganese	360	1.0		mg/Kg	10	10/17/2012 1:02:29 PM
Nickel	5.7	1.0		mg/Kg	2	10/17/2012 10:36:49 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 6:44:52 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 10:36:49 AM
Vanadium	13	5.0		mg/Kg	2	10/17/2012 10:36:49 AM
Zinc	13	5.0		mg/Kg	2	10/17/2012 10:36:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (14-16')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:35:00 AM
Lab ID: 1210279-003
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 3:50:57 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 3:50:57 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 3:50:57 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 3:50:57 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 3:50:57 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 3:50:57 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (14-16')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:35:00 AM
Lab ID: 1210279-003
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 3:50:57 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 3:50:57 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 3:50:57 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 3:50:57 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 3:50:57 PM
Surr: 2,4,6-Tribromophenol	82.4	21.3-145		%REC	1	10/9/2012 3:50:57 PM
Surr: 2-Fluorobiphenyl	73.6	20-131		%REC	1	10/9/2012 3:50:57 PM
Surr: 2-Fluorophenol	82.2	11.9-130		%REC	1	10/9/2012 3:50:57 PM
Surr: 4-Terphenyl-d14	66.7	25.1-149		%REC	1	10/9/2012 3:50:57 PM
Surr: Nitrobenzene-d5	76.7	25.6-137		%REC	1	10/9/2012 3:50:57 PM
Surr: Phenol-d5	80.8	20.3-132		%REC	1	10/9/2012 3:50:57 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00194	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Toluene	0.00151	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Ethylbenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Xylenes, Total	ND	0.00242		mg/Kg	1	10/8/2012 5:50:15 PM
Methyl tert-butyl ether (MTBE)	0.00518	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,2,4-Trimethylbenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,3,5-Trimethylbenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,2-Dichloroethane (EDC)	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,2-Dibromoethane (EDB)	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Naphthalene	ND	0.00242		mg/Kg	1	10/8/2012 5:50:15 PM
1-Methylnaphthalene	ND	0.00484		mg/Kg	1	10/8/2012 5:50:15 PM
2-Methylnaphthalene	ND	0.00484		mg/Kg	1	10/8/2012 5:50:15 PM
Acetone	0.0158	0.0121		mg/Kg	1	10/8/2012 5:50:15 PM
Bromobenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Bromodichloromethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Bromoform	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Bromomethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
2-Butanone	ND	0.0121		mg/Kg	1	10/8/2012 5:50:15 PM
Carbon tetrachloride	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Chlorobenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Chloroethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (14-16')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:35:00 AM
Lab ID: 1210279-003
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Chloromethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
2-Chlorotoluene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Carbon disulfide	ND	0.0121		mg/Kg	1	10/8/2012 5:50:15 PM
4-Chlorotoluene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
cis-1,2-DCE	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
cis-1,3-Dichloropropene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,2-Dibromo-3-chloropropane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Dibromochloromethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Dibromomethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,2-Dichlorobenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,3-Dichlorobenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,4-Dichlorobenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Dichlorodifluoromethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,1-Dichloroethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,1-Dichloroethene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,2-Dichloropropane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,3-Dichloropropane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
2,2-Dichloropropane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,1-Dichloropropene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Hexachlorobutadiene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Isopropylbenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
4-Isopropyltoluene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Methylene chloride	ND	0.00363		mg/Kg	1	10/8/2012 5:50:15 PM
n-Butylbenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
2-Hexanone	ND	0.0121		mg/Kg	1	10/8/2012 5:50:15 PM
n-Propylbenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
sec-Butylbenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Styrene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
4-Methyl-2-pentanone	ND	0.0121		mg/Kg	1	10/8/2012 5:50:15 PM
tert-Butylbenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,1,1,2-Tetrachloroethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,1,2,2-Tetrachloroethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Tetrachloroethene (PCE)	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
trans-1,2-DCE	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
trans-1,3-Dichloropropene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,2,3-Trichlorobenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,2,4-Trichlorobenzene	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,1,1-Trichloroethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
1,1,2-Trichloroethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Trichloroethene (TCE)	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Trichlorofluoromethane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (14-16')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:35:00 AM
Lab ID: 1210279-003
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Vinyl chloride	ND	0.00121		mg/Kg	1	10/8/2012 5:50:15 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	10/8/2012 5:50:15 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	1	10/8/2012 5:50:15 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/8/2012 5:50:15 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/8/2012 5:50:15 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (17-17.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:50:00 AM
Lab ID: 1210279-004
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/7/2012 2:18:27 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/7/2012 2:18:27 AM
Surr: DNOP	91.6	77.6-140		%REC	1	10/7/2012 2:18:27 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 4:53:17 AM
Surr: BFB	107	84-116		%REC	1	10/6/2012 4:53:17 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:29:13 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 6:49:38 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 10:54:32 AM
Barium	180	0.50		mg/Kg	5	10/17/2012 1:07:31 PM
Beryllium	0.74	0.30		mg/Kg	2	10/17/2012 10:54:32 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 10:54:32 AM
Chromium	6.9	0.60		mg/Kg	2	10/17/2012 10:54:32 AM
Cobalt	3.8	0.60		mg/Kg	2	10/17/2012 10:54:32 AM
Iron	12000	500		mg/Kg	500	10/17/2012 1:09:55 PM
Lead	4.8	0.50		mg/Kg	2	10/17/2012 10:54:32 AM
Manganese	280	1.0		mg/Kg	10	10/23/2012 6:52:01 PM
Nickel	6.7	1.0		mg/Kg	2	10/17/2012 10:54:32 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 6:49:38 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 10:54:32 AM
Vanadium	12	5.0		mg/Kg	2	10/17/2012 10:54:32 AM
Zinc	13	5.0		mg/Kg	2	10/17/2012 10:54:32 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (17-17.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:50:00 AM
Lab ID: 1210279-004
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 1:49:59 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 1:49:59 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 1:49:59 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 1:49:59 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 1:49:59 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 1:49:59 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (17-17.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:50:00 AM
Lab ID: 1210279-004
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 1:49:59 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 1:49:59 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 1:49:59 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 1:49:59 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 1:49:59 PM
Surr: 2,4,6-Tribromophenol	67.7	21.3-145		%REC	1	10/9/2012 1:49:59 PM
Surr: 2-Fluorobiphenyl	58.6	20-131		%REC	1	10/9/2012 1:49:59 PM
Surr: 2-Fluorophenol	58.9	11.9-130		%REC	1	10/9/2012 1:49:59 PM
Surr: 4-Terphenyl-d14	56.4	25.1-149		%REC	1	10/9/2012 1:49:59 PM
Surr: Nitrobenzene-d5	57.7	25.6-137		%REC	1	10/9/2012 1:49:59 PM
Surr: Phenol-d5	62.4	20.3-132		%REC	1	10/9/2012 1:49:59 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00139	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Toluene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Ethylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Xylenes, Total	ND	0.00233		mg/Kg	1	10/8/2012 6:21:07 PM
Methyl tert-butyl ether (MTBE)	0.00412	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,2,4-Trimethylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,3,5-Trimethylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,2-Dichloroethane (EDC)	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,2-Dibromoethane (EDB)	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Naphthalene	ND	0.00233		mg/Kg	1	10/8/2012 6:21:07 PM
1-Methylnaphthalene	ND	0.00466		mg/Kg	1	10/8/2012 6:21:07 PM
2-Methylnaphthalene	ND	0.00466		mg/Kg	1	10/8/2012 6:21:07 PM
Acetone	0.0877	0.0116		mg/Kg	1	10/8/2012 6:21:07 PM
Bromobenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Bromodichloromethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Bromoform	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Bromomethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
2-Butanone	ND	0.0116		mg/Kg	1	10/8/2012 6:21:07 PM
Carbon tetrachloride	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Chlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Chloroethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (17-17.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:50:00 AM
Lab ID: 1210279-004
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Chloromethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
2-Chlorotoluene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Carbon disulfide	ND	0.0116		mg/Kg	1	10/8/2012 6:21:07 PM
4-Chlorotoluene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
cis-1,2-DCE	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
cis-1,3-Dichloropropene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,2-Dibromo-3-chloropropane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Dibromochloromethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Dibromomethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,2-Dichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,3-Dichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,4-Dichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Dichlorodifluoromethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,1-Dichloroethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,1-Dichloroethene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,2-Dichloropropane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,3-Dichloropropane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
2,2-Dichloropropane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,1-Dichloropropene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Hexachlorobutadiene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Isopropylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
4-Isopropyltoluene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Methylene chloride	ND	0.00349		mg/Kg	1	10/8/2012 6:21:07 PM
n-Butylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
2-Hexanone	ND	0.0116		mg/Kg	1	10/8/2012 6:21:07 PM
n-Propylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
sec-Butylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Styrene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
4-Methyl-2-pentanone	ND	0.0116		mg/Kg	1	10/8/2012 6:21:07 PM
tert-Butylbenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,1,1,2-Tetrachloroethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,1,2,2-Tetrachloroethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Tetrachloroethene (PCE)	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
trans-1,2-DCE	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
trans-1,3-Dichloropropene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,2,3-Trichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,2,4-Trichlorobenzene	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,1,1-Trichloroethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
1,1,2-Trichloroethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Trichloroethene (TCE)	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Trichlorofluoromethane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (17-17.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 10:50:00 AM
Lab ID: 1210279-004
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Vinyl chloride	ND	0.00116		mg/Kg	1	10/8/2012 6:21:07 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/8/2012 6:21:07 PM
Surr: 4-Bromofluorobenzene	88.6	70-130		%REC	1	10/8/2012 6:21:07 PM
Surr: Dibromofluoromethane	108	70-130		%REC	1	10/8/2012 6:21:07 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/8/2012 6:21:07 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (19.5-20')
Project: SWMU NO.1
Collection Date: 10/2/2012 11:05:00 AM
Lab ID: 1210279-005
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/7/2012 2:43:18 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/7/2012 2:43:18 AM
Surr: DNOP	96.4	77.6-140		%REC	1	10/7/2012 2:43:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 5:21:59 AM
Surr: BFB	103	84-116		%REC	1	10/6/2012 5:21:59 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:45:02 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 7:01:34 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 10:59:42 AM
Barium	1300	5.0		mg/Kg	50	10/17/2012 1:23:06 PM
Beryllium	0.77	0.30		mg/Kg	2	10/17/2012 10:59:42 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 10:59:42 AM
Chromium	12	0.60		mg/Kg	2	10/17/2012 10:59:42 AM
Cobalt	11	0.60		mg/Kg	2	10/17/2012 10:59:42 AM
Iron	17000	500		mg/Kg	500	10/17/2012 1:25:32 PM
Lead	3.9	0.50		mg/Kg	2	10/17/2012 10:59:42 AM
Manganese	1200	5.0		mg/Kg	50	10/17/2012 1:23:06 PM
Nickel	16	1.0		mg/Kg	2	10/17/2012 10:59:42 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 7:01:34 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 10:59:42 AM
Vanadium	14	5.0		mg/Kg	2	10/17/2012 10:59:42 AM
Zinc	30	5.0		mg/Kg	2	10/17/2012 10:59:42 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (19.5-20')
Project: SWMU NO.1
Collection Date: 10/2/2012 11:05:00 AM
Lab ID: 1210279-005
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 4:21:18 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 4:21:18 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 4:21:18 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 4:21:18 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 4:21:18 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 4:21:18 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (19.5-20')
Project: SWMU NO.1
Collection Date: 10/2/2012 11:05:00 AM
Lab ID: 1210279-005
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 4:21:18 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 4:21:18 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 4:21:18 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 4:21:18 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 4:21:18 PM
Surr: 2,4,6-Tribromophenol	51.4	21.3-145		%REC	1	10/9/2012 4:21:18 PM
Surr: 2-Fluorobiphenyl	45.6	20-131		%REC	1	10/9/2012 4:21:18 PM
Surr: 2-Fluorophenol	50.5	11.9-130		%REC	1	10/9/2012 4:21:18 PM
Surr: 4-Terphenyl-d14	46.4	25.1-149		%REC	1	10/9/2012 4:21:18 PM
Surr: Nitrobenzene-d5	44.5	25.6-137		%REC	1	10/9/2012 4:21:18 PM
Surr: Phenol-d5	53.8	20.3-132		%REC	1	10/9/2012 4:21:18 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00395	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Toluene	0.00333	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Xylenes, Total	0.00212	0.00208		mg/Kg	1	10/8/2012 6:51:59 PM
Methyl tert-butyl ether (MTBE)	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Naphthalene	ND	0.00208		mg/Kg	1	10/8/2012 6:51:59 PM
1-Methylnaphthalene	ND	0.00416		mg/Kg	1	10/8/2012 6:51:59 PM
2-Methylnaphthalene	ND	0.00416		mg/Kg	1	10/8/2012 6:51:59 PM
Acetone	0.0127	0.0104		mg/Kg	1	10/8/2012 6:51:59 PM
Bromobenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Bromoform	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Bromomethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
2-Butanone	ND	0.0104		mg/Kg	1	10/8/2012 6:51:59 PM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Chloroethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: SWMU 1-2 (19.5-20')
Project: SWMU NO.1
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Lab ID: 1210279-005
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Chloromethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/8/2012 6:51:59 PM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Dibromomethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Methylene chloride	ND	0.00312		mg/Kg	1	10/8/2012 6:51:59 PM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
2-Hexanone	ND	0.0104		mg/Kg	1	10/8/2012 6:51:59 PM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Styrene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/8/2012 6:51:59 PM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 (19.5-20')
Project: SWMU NO.1
Collection Date: 10/2/2012 11:05:00 AM
Lab ID: 1210279-005
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/8/2012 6:51:59 PM
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%REC	1	10/8/2012 6:51:59 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/8/2012 6:51:59 PM
Surr: Dibromofluoromethane	93.8	70-130		%REC	1	10/8/2012 6:51:59 PM
Surr: Toluene-d8	92.9	70-130		%REC	1	10/8/2012 6:51:59 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 GW
Project: SWMU NO.1
Collection Date: 10/2/2012 1:45:00 PM
Lab ID: 1210279-006
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	2.0		mg/L	1	10/8/2012 11:04:25 AM
Motor Oil Range Organics (MRO)	ND	10		mg/L	1	10/8/2012 11:04:25 AM
Surr: DNOP	117	79.5-166		%REC	1	10/8/2012 11:04:25 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.71	0.25		mg/L	5	10/5/2012 5:49:08 PM
Surr: BFB	106	69.8-119		%REC	5	10/5/2012 5:49:08 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	3.0	1.0		mg/L	10	10/4/2012 4:02:29 PM
Chloride	1600	100		mg/L	200	10/11/2012 12:55:50 AM
Sulfate	550	25		mg/L	50	10/4/2012 4:14:53 PM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	56	0.20	*	mg/L	20	10/12/2012 9:19:00 AM
Beryllium	0.21	0.050	*	mg/L	5	10/10/2012 8:05:38 PM
Cadmium	ND	0.050		mg/L	5	10/10/2012 8:05:38 PM
Chromium	0.31	0.15	*	mg/L	5	10/12/2012 9:15:42 AM
Cobalt	0.53	0.15		mg/L	5	10/10/2012 8:05:38 PM
Iron	140	5.0	*	mg/L	50	10/12/2012 10:14:03 AM
Manganese	95	0.20	*	mg/L	20	10/12/2012 9:19:00 AM
Nickel	0.95	0.25	*	mg/L	5	10/10/2012 8:05:38 PM
Silver	ND	0.12		mg/L	5	10/10/2012 8:05:38 PM
Vanadium	ND	1.2		mg/L	5	10/10/2012 8:05:38 PM
Zinc	1.1	0.25		mg/L	5	10/12/2012 9:15:42 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.012		mg/L	2.5	10/15/2012 5:42:26 PM
Arsenic	0.063	0.012	*	mg/L	2.5	10/15/2012 5:42:26 PM
Lead	1.7	0.050	*	mg/L	10	10/16/2012 6:06:18 PM
Selenium	0.059	0.050	*	mg/L	10	10/16/2012 6:06:18 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	0.00027	0.00020		mg/L	1	10/12/2012 5:11:45 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Acenaphthylene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Aniline	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Anthracene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Azobenzene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Benz(a)anthracene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/8/2012 6:59:51 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 GW
Project: SWMU NO.1
Collection Date: 10/2/2012 1:45:00 PM
Lab ID: 1210279-006
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Benzoic acid	ND	20		µg/L	1	10/8/2012 6:59:51 PM
Benzyl alcohol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/8/2012 6:59:51 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Carbazole	ND	10		µg/L	1	10/8/2012 6:59:51 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
4-Chloroaniline	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2-Chlorophenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Chrysene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Dibenzofuran	ND	10		µg/L	1	10/8/2012 6:59:51 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Diethyl phthalate	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Dimethyl phthalate	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/8/2012 6:59:51 PM
2,4-Dimethylphenol	26	10		µg/L	1	10/8/2012 6:59:51 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/8/2012 6:59:51 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/8/2012 6:59:51 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Fluoranthene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Fluorene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Hexachlorobenzene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Hexachloroethane	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Isophorone	ND	10		µg/L	1	10/8/2012 6:59:51 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/8/2012 6:59:51 PM

Qualifiers:

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Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
3+4-Methylphenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/8/2012 6:59:51 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/8/2012 6:59:51 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Naphthalene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2-Nitroaniline	ND	10		µg/L	1	10/8/2012 6:59:51 PM
3-Nitroaniline	ND	10		µg/L	1	10/8/2012 6:59:51 PM
4-Nitroaniline	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Nitrobenzene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2-Nitrophenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
4-Nitrophenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Pentachlorophenol	ND	20		µg/L	1	10/8/2012 6:59:51 PM
Phenanthrene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Phenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Pyrene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Pyridine	ND	10		µg/L	1	10/8/2012 6:59:51 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/8/2012 6:59:51 PM
Surr: 2,4,6-Tribromophenol	68.0	44.2-126		%REC	1	10/8/2012 6:59:51 PM
Surr: 2-Fluorobiphenyl	61.1	37-114		%REC	1	10/8/2012 6:59:51 PM
Surr: 2-Fluorophenol	49.4	23.4-98		%REC	1	10/8/2012 6:59:51 PM
Surr: 4-Terphenyl-d14	52.7	41.3-116		%REC	1	10/8/2012 6:59:51 PM
Surr: Nitrobenzene-d5	71.8	39.5-118		%REC	1	10/8/2012 6:59:51 PM
Surr: Phenol-d5	44.9	20.9-95.9		%REC	1	10/8/2012 6:59:51 PM
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Benzene	17	2.0		µg/L	2	10/4/2012 9:52:56 PM
Toluene	4.0	2.0		µg/L	2	10/4/2012 9:52:56 PM
Ethylbenzene	4.7	2.0		µg/L	2	10/4/2012 9:52:56 PM
Methyl tert-butyl ether (MTBE)	43	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,2,4-Trimethylbenzene	10	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Naphthalene	ND	4.0		µg/L	2	10/4/2012 9:52:56 PM
1-Methylnaphthalene	ND	8.0		µg/L	2	10/4/2012 9:52:56 PM
2-Methylnaphthalene	ND	8.0		µg/L	2	10/4/2012 9:52:56 PM
Acetone	27	20		µg/L	2	10/4/2012 9:52:56 PM
Bromobenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Bromodichloromethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 GW
Project: SWMU NO.1
Collection Date: 10/2/2012 1:45:00 PM
Lab ID: 1210279-006
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Bromoform	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Bromomethane	ND	6.0		µg/L	2	10/4/2012 9:52:56 PM
2-Butanone	ND	20		µg/L	2	10/4/2012 9:52:56 PM
Carbon disulfide	ND	20		µg/L	2	10/4/2012 9:52:56 PM
Carbon Tetrachloride	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Chlorobenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Chloroethane	ND	4.0		µg/L	2	10/4/2012 9:52:56 PM
Chloroform	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Chloromethane	ND	6.0		µg/L	2	10/4/2012 9:52:56 PM
2-Chlorotoluene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
4-Chlorotoluene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
cis-1,2-DCE	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	10/4/2012 9:52:56 PM
Dibromochloromethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Dibromomethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Dichlorodifluoromethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,1-Dichloroethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,1-Dichloroethene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,2-Dichloropropane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,3-Dichloropropane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
2,2-Dichloropropane	ND	4.0		µg/L	2	10/4/2012 9:52:56 PM
1,1-Dichloropropene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Hexachlorobutadiene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
2-Hexanone	ND	20		µg/L	2	10/4/2012 9:52:56 PM
Isopropylbenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
4-Isopropyltoluene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
4-Methyl-2-pentanone	ND	20		µg/L	2	10/4/2012 9:52:56 PM
Methylene Chloride	ND	6.0		µg/L	2	10/4/2012 9:52:56 PM
n-Butylbenzene	ND	6.0		µg/L	2	10/4/2012 9:52:56 PM
n-Propylbenzene	2.7	2.0		µg/L	2	10/4/2012 9:52:56 PM
sec-Butylbenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Styrene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
tert-Butylbenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	10/4/2012 9:52:56 PM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
trans-1,2-DCE	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-2 GW
Project: SWMU NO.1
Collection Date: 10/2/2012 1:45:00 PM
Lab ID: 1210279-006
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Trichloroethene (TCE)	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Trichlorofluoromethane	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	10/4/2012 9:52:56 PM
Vinyl chloride	ND	2.0		µg/L	2	10/4/2012 9:52:56 PM
Xylenes, Total	20	3.0		µg/L	2	10/4/2012 9:52:56 PM
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%REC	2	10/4/2012 9:52:56 PM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	2	10/4/2012 9:52:56 PM
Surr: Dibromofluoromethane	94.8	70-130		%REC	2	10/4/2012 9:52:56 PM
Surr: Toluene-d8	100	70-130		%REC	2	10/4/2012 9:52:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: SWMU NO.1
Collection Date:
Lab ID: 1210279-007
Matrix: TRIP BLANK
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Benzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Toluene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Ethylbenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Naphthalene	ND	2.0		µg/L	1	10/4/2012 10:51:26 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2012 10:51:26 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2012 10:51:26 PM
Acetone	ND	10		µg/L	1	10/4/2012 10:51:26 PM
Bromobenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Bromoform	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Bromomethane	ND	3.0		µg/L	1	10/4/2012 10:51:26 PM
2-Butanone	ND	10		µg/L	1	10/4/2012 10:51:26 PM
Carbon disulfide	ND	10		µg/L	1	10/4/2012 10:51:26 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Chlorobenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Chloroethane	ND	2.0		µg/L	1	10/4/2012 10:51:26 PM
Chloroform	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Chloromethane	ND	3.0		µg/L	1	10/4/2012 10:51:26 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/4/2012 10:51:26 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Dibromomethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/4/2012 10:51:26 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
2-Hexanone	ND	10		µg/L	1	10/4/2012 10:51:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: SWMU NO.1
Collection Date:
Lab ID: 1210279-007
Matrix: TRIP BLANK
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Isopropylbenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/4/2012 10:51:26 PM
Methylene Chloride	ND	3.0		µg/L	1	10/4/2012 10:51:26 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/4/2012 10:51:26 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Styrene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/4/2012 10:51:26 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/4/2012 10:51:26 PM
Vinyl chloride	ND	1.0		µg/L	1	10/4/2012 10:51:26 PM
Xylenes, Total	ND	1.5		µg/L	1	10/4/2012 10:51:26 PM
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	10/4/2012 10:51:26 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/4/2012 10:51:26 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/4/2012 10:51:26 PM
Surr: Toluene-d8	99.4	70-130		%REC	1	10/4/2012 10:51:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (2-4')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:20:00 PM
Lab ID: 1210279-008
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/7/2012 3:08:09 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/7/2012 3:08:09 AM
Surr: DNOP	98.5	77.6-140		%REC	1	10/7/2012 3:08:09 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/5/2012 12:06:14 PM
Surr: BFB	99.4	84-116		%REC	1	10/5/2012 12:06:14 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:46:48 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	2.5		mg/Kg	1	10/23/2012 7:04:15 PM
Arsenic	ND	50		mg/Kg	20	10/17/2012 1:28:13 PM
Barium	770	2.0		mg/Kg	20	10/17/2012 1:28:13 PM
Beryllium	0.39	0.15		mg/Kg	1	10/17/2012 11:02:17 AM
Cadmium	ND	0.10		mg/Kg	1	10/17/2012 11:02:17 AM
Chromium	3.8	0.30		mg/Kg	1	10/17/2012 11:02:17 AM
Cobalt	2.4	0.30		mg/Kg	1	10/17/2012 11:02:17 AM
Iron	4800	200		mg/Kg	200	10/23/2012 7:09:43 PM
Lead	ND	0.25		mg/Kg	1	10/17/2012 11:02:17 AM
Manganese	340	2.0		mg/Kg	20	10/17/2012 1:28:13 PM
Nickel	3.8	0.50		mg/Kg	1	10/17/2012 11:02:17 AM
Selenium	ND	2.5		mg/Kg	1	10/23/2012 7:04:15 PM
Silver	ND	0.25		mg/Kg	1	10/17/2012 11:02:17 AM
Vanadium	11	2.5		mg/Kg	1	10/17/2012 11:02:17 AM
Zinc	9.1	2.5		mg/Kg	1	10/17/2012 11:02:17 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (2-4')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:20:00 PM
Lab ID: 1210279-008
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 4:51:45 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 4:51:45 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 4:51:45 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 4:51:45 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 4:51:45 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 4:51:45 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (2-4')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:20:00 PM
Lab ID: 1210279-008
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 4:51:45 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 4:51:45 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 4:51:45 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 4:51:45 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 4:51:45 PM
Surr: 2,4,6-Tribromophenol	75.8	21.3-145		%REC	1	10/9/2012 4:51:45 PM
Surr: 2-Fluorobiphenyl	74.5	20-131		%REC	1	10/9/2012 4:51:45 PM
Surr: 2-Fluorophenol	83.5	11.9-130		%REC	1	10/9/2012 4:51:45 PM
Surr: 4-Terphenyl-d14	65.9	25.1-149		%REC	1	10/9/2012 4:51:45 PM
Surr: Nitrobenzene-d5	79.2	25.6-137		%REC	1	10/9/2012 4:51:45 PM
Surr: Phenol-d5	83.3	20.3-132		%REC	1	10/9/2012 4:51:45 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Toluene	0.00187	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Ethylbenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Xylenes, Total	ND	0.00209		mg/Kg	1	10/8/2012 7:22:49 PM
Methyl tert-butyl ether (MTBE)	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,2,4-Trimethylbenzene	0.00128	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,3,5-Trimethylbenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,2-Dichloroethane (EDC)	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,2-Dibromoethane (EDB)	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Naphthalene	ND	0.00209		mg/Kg	1	10/8/2012 7:22:49 PM
1-Methylnaphthalene	ND	0.00419		mg/Kg	1	10/8/2012 7:22:49 PM
2-Methylnaphthalene	ND	0.00419		mg/Kg	1	10/8/2012 7:22:49 PM
Acetone	0.0418	0.0105		mg/Kg	1	10/8/2012 7:22:49 PM
Bromobenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Bromodichloromethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Bromoform	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Bromomethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
2-Butanone	ND	0.0105		mg/Kg	1	10/8/2012 7:22:49 PM
Carbon tetrachloride	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Chlorobenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Chloroethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (2-4')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:20:00 PM
Lab ID: 1210279-008
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Chloromethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
2-Chlorotoluene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Carbon disulfide	ND	0.0105		mg/Kg	1	10/8/2012 7:22:49 PM
4-Chlorotoluene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
cis-1,2-DCE	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
cis-1,3-Dichloropropene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,2-Dibromo-3-chloropropane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Dibromochloromethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Dibromomethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,2-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,3-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,4-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Dichlorodifluoromethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,1-Dichloroethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,1-Dichloroethene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,2-Dichloropropane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,3-Dichloropropane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
2,2-Dichloropropane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,1-Dichloropropene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Hexachlorobutadiene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Isopropylbenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
4-Isopropyltoluene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Methylene chloride	ND	0.00314		mg/Kg	1	10/8/2012 7:22:49 PM
n-Butylbenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
2-Hexanone	ND	0.0105		mg/Kg	1	10/8/2012 7:22:49 PM
n-Propylbenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
sec-Butylbenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Styrene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
4-Methyl-2-pentanone	ND	0.0105		mg/Kg	1	10/8/2012 7:22:49 PM
tert-Butylbenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,1,1,2-Tetrachloroethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,1,2,2-Tetrachloroethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Tetrachloroethene (PCE)	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
trans-1,2-DCE	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
trans-1,3-Dichloropropene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,2,3-Trichlorobenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,2,4-Trichlorobenzene	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,1,1-Trichloroethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
1,1,2-Trichloroethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Trichloroethene (TCE)	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Trichlorofluoromethane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (2-4')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:20:00 PM
Lab ID: 1210279-008
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Vinyl chloride	ND	0.00105		mg/Kg	1	10/8/2012 7:22:49 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	10/8/2012 7:22:49 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	1	10/8/2012 7:22:49 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/8/2012 7:22:49 PM
Surr: Toluene-d8	98.3	70-130		%REC	1	10/8/2012 7:22:49 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:35:00 PM
Lab ID: 1210279-009
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/7/2012 3:32:59 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/7/2012 3:32:59 AM
Surr: DNOP	96.0	77.6-140		%REC	1	10/7/2012 3:32:59 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 5:50:42 AM
Surr: BFB	106	84-116		%REC	1	10/6/2012 5:50:42 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:55:48 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 7:12:19 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 11:09:52 AM
Barium	220	0.50		mg/Kg	5	10/17/2012 1:34:59 PM
Beryllium	0.72	0.30		mg/Kg	2	10/17/2012 11:09:52 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 11:09:52 AM
Chromium	7.6	0.60		mg/Kg	2	10/17/2012 11:09:52 AM
Cobalt	3.6	0.60		mg/Kg	2	10/17/2012 11:09:52 AM
Iron	11000	500		mg/Kg	500	10/17/2012 1:37:26 PM
Lead	3.4	0.50		mg/Kg	2	10/17/2012 11:09:52 AM
Manganese	420	1.0		mg/Kg	10	10/23/2012 7:14:46 PM
Nickel	5.7	1.0		mg/Kg	2	10/17/2012 11:09:52 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 7:12:19 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 11:09:52 AM
Vanadium	15	5.0		mg/Kg	2	10/17/2012 11:09:52 AM
Zinc	11	5.0		mg/Kg	2	10/17/2012 11:09:52 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Benzoic acid	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:35:00 PM
Lab ID: 1210279-009
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 2:20:03 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 2:20:03 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 2:20:03 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
2,4-Dichlorophenol	ND	0.41		mg/Kg	1	10/9/2012 2:20:03 PM
2,4-Dimethylphenol	ND	0.31		mg/Kg	1	10/9/2012 2:20:03 PM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
2,4-Dinitrophenol	ND	0.41		mg/Kg	1	10/9/2012 2:20:03 PM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Isophorone	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
2-Methylphenol	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:35:00 PM
Lab ID: 1210279-009
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
4-Nitroaniline	ND	0.41		mg/Kg	1	10/9/2012 2:20:03 PM
Nitrobenzene	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 2:20:03 PM
Pentachlorophenol	ND	0.41		mg/Kg	1	10/9/2012 2:20:03 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Pyridine	ND	0.51		mg/Kg	1	10/9/2012 2:20:03 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 2:20:03 PM
Surr: 2,4,6-Tribromophenol	86.8	21.3-145		%REC	1	10/9/2012 2:20:03 PM
Surr: 2-Fluorobiphenyl	81.7	20-131		%REC	1	10/9/2012 2:20:03 PM
Surr: 2-Fluorophenol	85.3	11.9-130		%REC	1	10/9/2012 2:20:03 PM
Surr: 4-Terphenyl-d14	71.9	25.1-149		%REC	1	10/9/2012 2:20:03 PM
Surr: Nitrobenzene-d5	79.7	25.6-137		%REC	1	10/9/2012 2:20:03 PM
Surr: Phenol-d5	84.0	20.3-132		%REC	1	10/9/2012 2:20:03 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Toluene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Ethylbenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Xylenes, Total	ND	0.00246		mg/Kg	1	10/8/2012 7:53:36 PM
Methyl tert-butyl ether (MTBE)	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,2,4-Trimethylbenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,3,5-Trimethylbenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,2-Dichloroethane (EDC)	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,2-Dibromoethane (EDB)	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Naphthalene	ND	0.00246		mg/Kg	1	10/8/2012 7:53:36 PM
1-Methylnaphthalene	ND	0.00492		mg/Kg	1	10/8/2012 7:53:36 PM
2-Methylnaphthalene	ND	0.00492		mg/Kg	1	10/8/2012 7:53:36 PM
Acetone	0.0190	0.0123		mg/Kg	1	10/8/2012 7:53:36 PM
Bromobenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Bromodichloromethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Bromoform	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Bromomethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
2-Butanone	ND	0.0123		mg/Kg	1	10/8/2012 7:53:36 PM
Carbon tetrachloride	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Chlorobenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Chloroethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:35:00 PM
Lab ID: 1210279-009
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Chloromethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
2-Chlorotoluene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Carbon disulfide	ND	0.0123		mg/Kg	1	10/8/2012 7:53:36 PM
4-Chlorotoluene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
cis-1,2-DCE	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
cis-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,2-Dibromo-3-chloropropane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Dibromochloromethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Dibromomethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,2-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,3-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,4-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Dichlorodifluoromethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,1-Dichloroethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,1-Dichloroethene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,3-Dichloropropane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
2,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,1-Dichloropropene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Hexachlorobutadiene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Isopropylbenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
4-Isopropyltoluene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Methylene chloride	ND	0.00369		mg/Kg	1	10/8/2012 7:53:36 PM
n-Butylbenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
2-Hexanone	ND	0.0123		mg/Kg	1	10/8/2012 7:53:36 PM
n-Propylbenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
sec-Butylbenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Styrene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
4-Methyl-2-pentanone	ND	0.0123		mg/Kg	1	10/8/2012 7:53:36 PM
tert-Butylbenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,1,1,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,1,2,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Tetrachloroethene (PCE)	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
trans-1,2-DCE	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
trans-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,2,3-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,2,4-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,1,1-Trichloroethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
1,1,2-Trichloroethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Trichloroethene (TCE)	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Trichlorofluoromethane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (10-11')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:35:00 PM
Lab ID: 1210279-009
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Vinyl chloride	ND	0.00123		mg/Kg	1	10/8/2012 7:53:36 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	10/8/2012 7:53:36 PM
Surr: 4-Bromofluorobenzene	88.1	70-130		%REC	1	10/8/2012 7:53:36 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/8/2012 7:53:36 PM
Surr: Toluene-d8	92.4	70-130		%REC	1	10/8/2012 7:53:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.1
Lab ID: 1210279-010 **Matrix:** SOIL

Client Sample ID: SWMU 1-3 (11-11.25')
Collection Date: 10/2/2012 4:50:00 PM
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/7/2012 3:57:50 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/7/2012 3:57:50 AM
Surr: DNOP	94.7	77.6-140		%REC	1	10/7/2012 3:57:50 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/5/2012 12:35:00 PM
Surr: BFB	99.5	84-116		%REC	1	10/5/2012 12:35:00 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:57:38 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 7:17:10 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 11:16:34 AM
Barium	110	0.50		mg/Kg	5	10/17/2012 1:40:18 PM
Beryllium	0.63	0.30		mg/Kg	2	10/17/2012 11:16:34 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 11:16:34 AM
Chromium	4.8	0.60		mg/Kg	2	10/17/2012 11:16:34 AM
Cobalt	3.2	0.60		mg/Kg	2	10/17/2012 11:16:34 AM
Iron	10000	500		mg/Kg	500	10/17/2012 1:42:41 PM
Lead	4.0	0.50		mg/Kg	2	10/17/2012 11:16:34 AM
Manganese	380	1.0		mg/Kg	10	10/23/2012 7:19:37 PM
Nickel	5.0	1.0		mg/Kg	2	10/17/2012 11:16:34 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 7:17:10 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 11:16:34 AM
Vanadium	10	5.0		mg/Kg	2	10/17/2012 11:16:34 AM
Zinc	10	5.0		mg/Kg	2	10/17/2012 11:16:34 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (11-11.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:50:00 PM
Lab ID: 1210279-010
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 2:50:19 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 2:50:19 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 2:50:19 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 2:50:19 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 2:50:19 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 2:50:19 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (11-11.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:50:00 PM
Lab ID: 1210279-010
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 2:50:19 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 2:50:19 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 2:50:19 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 2:50:19 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 2:50:19 PM
Surr: 2,4,6-Tribromophenol	83.8	21.3-145		%REC	1	10/9/2012 2:50:19 PM
Surr: 2-Fluorobiphenyl	76.6	20-131		%REC	1	10/9/2012 2:50:19 PM
Surr: 2-Fluorophenol	73.1	11.9-130		%REC	1	10/9/2012 2:50:19 PM
Surr: 4-Terphenyl-d14	66.9	25.1-149		%REC	1	10/9/2012 2:50:19 PM
Surr: Nitrobenzene-d5	73.7	25.6-137		%REC	1	10/9/2012 2:50:19 PM
Surr: Phenol-d5	77.1	20.3-132		%REC	1	10/9/2012 2:50:19 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Toluene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Ethylbenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Xylenes, Total	ND	0.00217		mg/Kg	1	10/8/2012 8:24:25 PM
Methyl tert-butyl ether (MTBE)	0.00115	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,2,4-Trimethylbenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,3,5-Trimethylbenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,2-Dichloroethane (EDC)	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,2-Dibromoethane (EDB)	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Naphthalene	ND	0.00217		mg/Kg	1	10/8/2012 8:24:25 PM
1-Methylnaphthalene	ND	0.00434		mg/Kg	1	10/8/2012 8:24:25 PM
2-Methylnaphthalene	ND	0.00434		mg/Kg	1	10/8/2012 8:24:25 PM
Acetone	0.0469	0.0108		mg/Kg	1	10/8/2012 8:24:25 PM
Bromobenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Bromodichloromethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Bromoform	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Bromomethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
2-Butanone	ND	0.0108		mg/Kg	1	10/8/2012 8:24:25 PM
Carbon tetrachloride	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Chlorobenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Chloroethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (11-11.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:50:00 PM
Lab ID: 1210279-010
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Chloromethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
2-Chlorotoluene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Carbon disulfide	ND	0.0108		mg/Kg	1	10/8/2012 8:24:25 PM
4-Chlorotoluene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
cis-1,2-DCE	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
cis-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,2-Dibromo-3-chloropropane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Dibromochloromethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Dibromomethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,2-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,3-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,4-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Dichlorodifluoromethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,1-Dichloroethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,1-Dichloroethene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,3-Dichloropropane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
2,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,1-Dichloropropene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Hexachlorobutadiene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Isopropylbenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
4-Isopropyltoluene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Methylene chloride	ND	0.00325		mg/Kg	1	10/8/2012 8:24:25 PM
n-Butylbenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
2-Hexanone	ND	0.0108		mg/Kg	1	10/8/2012 8:24:25 PM
n-Propylbenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
sec-Butylbenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Styrene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
4-Methyl-2-pentanone	ND	0.0108		mg/Kg	1	10/8/2012 8:24:25 PM
tert-Butylbenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,1,1,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,1,2,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Tetrachloroethene (PCE)	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
trans-1,2-DCE	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
trans-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,2,3-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,2,4-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,1,1-Trichloroethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
1,1,2-Trichloroethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Trichloroethene (TCE)	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Trichlorofluoromethane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (11-11.25')
Project: SWMU NO.1
Collection Date: 10/2/2012 4:50:00 PM
Lab ID: 1210279-010
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Vinyl chloride	ND	0.00108		mg/Kg	1	10/8/2012 8:24:25 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	10/8/2012 8:24:25 PM
Surr: 4-Bromofluorobenzene	89.2	70-130		%REC	1	10/8/2012 8:24:25 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/8/2012 8:24:25 PM
Surr: Toluene-d8	89.1	70-130		%REC	1	10/8/2012 8:24:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (18.5-19.5')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:10:00 PM
Lab ID: 1210279-011
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/7/2012 4:22:29 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/7/2012 4:22:29 AM
Surr: DNOP	96.0	77.6-140		%REC	1	10/7/2012 4:22:29 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 2:54:09 AM
Surr: BFB	124	84-116	S	%REC	1	10/6/2012 2:54:09 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 10:59:26 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 7:22:03 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 11:32:55 AM
Barium	270	1.0		mg/Kg	10	10/17/2012 1:45:34 PM
Beryllium	0.79	0.30		mg/Kg	2	10/17/2012 11:32:55 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 11:32:55 AM
Chromium	9.3	0.60		mg/Kg	2	10/17/2012 11:32:55 AM
Cobalt	5.4	0.60		mg/Kg	2	10/17/2012 11:32:55 AM
Iron	16000	500		mg/Kg	500	10/17/2012 1:48:00 PM
Lead	4.8	0.50		mg/Kg	2	10/17/2012 11:32:55 AM
Manganese	510	2.0		mg/Kg	20	10/23/2012 7:24:33 PM
Nickel	10	1.0		mg/Kg	2	10/17/2012 11:32:55 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 7:22:03 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 11:32:55 AM
Vanadium	11	5.0		mg/Kg	2	10/17/2012 11:32:55 AM
Zinc	15	5.0		mg/Kg	2	10/17/2012 11:32:55 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Benzoic acid	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (18.5-19.5')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:10:00 PM
Lab ID: 1210279-011
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 5:22:05 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 5:22:05 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 5:22:05 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 5:22:05 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 5:22:05 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 5:22:05 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Isophorone	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
2-Methylphenol	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (18.5-19.5')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:10:00 PM
Lab ID: 1210279-011
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 5:22:05 PM
Nitrobenzene	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 5:22:05 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 5:22:05 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Pyridine	ND	0.49		mg/Kg	1	10/9/2012 5:22:05 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 5:22:05 PM
Surr: 2,4,6-Tribromophenol	74.8	21.3-145		%REC	1	10/9/2012 5:22:05 PM
Surr: 2-Fluorobiphenyl	70.5	20-131		%REC	1	10/9/2012 5:22:05 PM
Surr: 2-Fluorophenol	72.6	11.9-130		%REC	1	10/9/2012 5:22:05 PM
Surr: 4-Terphenyl-d14	70.5	25.1-149		%REC	1	10/9/2012 5:22:05 PM
Surr: Nitrobenzene-d5	72.2	25.6-137		%REC	1	10/9/2012 5:22:05 PM
Surr: Phenol-d5	76.1	20.3-132		%REC	1	10/9/2012 5:22:05 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00269	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Toluene	0.00164	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Ethylbenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Xylenes, Total	ND	0.00258		mg/Kg	1	10/8/2012 8:55:09 PM
Methyl tert-butyl ether (MTBE)	0.00256	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,2,4-Trimethylbenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,3,5-Trimethylbenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,2-Dichloroethane (EDC)	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,2-Dibromoethane (EDB)	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Naphthalene	ND	0.00258		mg/Kg	1	10/8/2012 8:55:09 PM
1-Methylnaphthalene	ND	0.00517		mg/Kg	1	10/8/2012 8:55:09 PM
2-Methylnaphthalene	ND	0.00517		mg/Kg	1	10/8/2012 8:55:09 PM
Acetone	ND	0.0129		mg/Kg	1	10/8/2012 8:55:09 PM
Bromobenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Bromodichloromethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Bromoform	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Bromomethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
2-Butanone	ND	0.0129		mg/Kg	1	10/8/2012 8:55:09 PM
Carbon tetrachloride	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Chlorobenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Chloroethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (18.5-19.5')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:10:00 PM
Lab ID: 1210279-011
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Chloromethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
2-Chlorotoluene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Carbon disulfide	ND	0.0129		mg/Kg	1	10/8/2012 8:55:09 PM
4-Chlorotoluene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
cis-1,2-DCE	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
cis-1,3-Dichloropropene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,2-Dibromo-3-chloropropane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Dibromochloromethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Dibromomethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,2-Dichlorobenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,3-Dichlorobenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,4-Dichlorobenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Dichlorodifluoromethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,1-Dichloroethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,1-Dichloroethene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,2-Dichloropropane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,3-Dichloropropane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
2,2-Dichloropropane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,1-Dichloropropene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Hexachlorobutadiene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Isopropylbenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
4-Isopropyltoluene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Methylene chloride	ND	0.00388		mg/Kg	1	10/8/2012 8:55:09 PM
n-Butylbenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
2-Hexanone	ND	0.0129		mg/Kg	1	10/8/2012 8:55:09 PM
n-Propylbenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
sec-Butylbenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Styrene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
4-Methyl-2-pentanone	ND	0.0129		mg/Kg	1	10/8/2012 8:55:09 PM
tert-Butylbenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,1,1,2-Tetrachloroethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,1,2,2-Tetrachloroethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Tetrachloroethene (PCE)	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
trans-1,2-DCE	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
trans-1,3-Dichloropropene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,2,3-Trichlorobenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,2,4-Trichlorobenzene	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,1,1-Trichloroethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
1,1,2-Trichloroethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Trichloroethene (TCE)	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Trichlorofluoromethane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (18.5-19.5')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:10:00 PM
Lab ID: 1210279-011
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Vinyl chloride	ND	0.00129		mg/Kg	1	10/8/2012 8:55:09 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	10/8/2012 8:55:09 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%REC	1	10/8/2012 8:55:09 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/8/2012 8:55:09 PM
Surr: Toluene-d8	88.3	70-130		%REC	1	10/8/2012 8:55:09 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (19.5-20')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:25:00 PM
Lab ID: 1210279-012
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/7/2012 4:47:05 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/7/2012 4:47:05 AM
Surr: DNOP	96.2	77.6-140		%REC	1	10/7/2012 4:47:05 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 4:55:02 AM
Surr: BFB	110	84-116		%REC	1	10/6/2012 4:55:02 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:01:18 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 7:26:58 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 11:38:08 AM
Barium	400	1.0		mg/Kg	10	10/17/2012 2:00:57 PM
Beryllium	0.83	0.30		mg/Kg	2	10/17/2012 11:38:08 AM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 11:38:08 AM
Chromium	10	0.60		mg/Kg	2	10/17/2012 11:38:08 AM
Cobalt	5.7	0.60		mg/Kg	2	10/17/2012 11:38:08 AM
Iron	16000	500		mg/Kg	500	10/17/2012 2:05:01 PM
Lead	2.8	0.50		mg/Kg	2	10/17/2012 11:38:08 AM
Manganese	610	2.0		mg/Kg	20	10/23/2012 7:36:44 PM
Nickel	12	1.0		mg/Kg	2	10/17/2012 11:38:08 AM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 7:26:58 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 11:38:08 AM
Vanadium	10	5.0		mg/Kg	2	10/17/2012 11:38:08 AM
Zinc	16	5.0		mg/Kg	2	10/17/2012 11:38:08 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (19.5-20')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:25:00 PM
Lab ID: 1210279-012
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 5:52:19 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 5:52:19 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 5:52:19 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 5:52:19 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 5:52:19 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 5:52:19 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (19.5-20')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:25:00 PM
Lab ID: 1210279-012
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 5:52:19 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 5:52:19 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 5:52:19 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 5:52:19 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 5:52:19 PM
Surr: 2,4,6-Tribromophenol	80.2	21.3-145		%REC	1	10/9/2012 5:52:19 PM
Surr: 2-Fluorobiphenyl	74.8	20-131		%REC	1	10/9/2012 5:52:19 PM
Surr: 2-Fluorophenol	80.7	11.9-130		%REC	1	10/9/2012 5:52:19 PM
Surr: 4-Terphenyl-d14	65.7	25.1-149		%REC	1	10/9/2012 5:52:19 PM
Surr: Nitrobenzene-d5	78.3	25.6-137		%REC	1	10/9/2012 5:52:19 PM
Surr: Phenol-d5	78.3	20.3-132		%REC	1	10/9/2012 5:52:19 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00855	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Toluene	0.00500	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Ethylbenzene	0.00125	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Xylenes, Total	0.00344	0.00240		mg/Kg	1	10/8/2012 9:25:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,2,4-Trimethylbenzene	0.00132	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,3,5-Trimethylbenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,2-Dichloroethane (EDC)	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,2-Dibromoethane (EDB)	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Naphthalene	ND	0.00240		mg/Kg	1	10/8/2012 9:25:50 PM
1-Methylnaphthalene	ND	0.00481		mg/Kg	1	10/8/2012 9:25:50 PM
2-Methylnaphthalene	ND	0.00481		mg/Kg	1	10/8/2012 9:25:50 PM
Acetone	ND	0.0120		mg/Kg	1	10/8/2012 9:25:50 PM
Bromobenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Bromodichloromethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Bromoform	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Bromomethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
2-Butanone	ND	0.0120		mg/Kg	1	10/8/2012 9:25:50 PM
Carbon tetrachloride	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Chlorobenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Chloroethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Lab ID: 1210279-012
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Chloromethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
2-Chlorotoluene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Carbon disulfide	ND	0.0120		mg/Kg	1	10/8/2012 9:25:50 PM
4-Chlorotoluene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
cis-1,2-DCE	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
cis-1,3-Dichloropropene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,2-Dibromo-3-chloropropane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Dibromochloromethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Dibromomethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,2-Dichlorobenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,3-Dichlorobenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,4-Dichlorobenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Dichlorodifluoromethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,1-Dichloroethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,1-Dichloroethene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,2-Dichloropropane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,3-Dichloropropane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
2,2-Dichloropropane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,1-Dichloropropene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Hexachlorobutadiene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Isopropylbenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
4-Isopropyltoluene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Methylene chloride	ND	0.00360		mg/Kg	1	10/8/2012 9:25:50 PM
n-Butylbenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
2-Hexanone	ND	0.0120		mg/Kg	1	10/8/2012 9:25:50 PM
n-Propylbenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
sec-Butylbenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Styrene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
4-Methyl-2-pentanone	ND	0.0120		mg/Kg	1	10/8/2012 9:25:50 PM
tert-Butylbenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,1,1,2-Tetrachloroethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,1,2,2-Tetrachloroethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Tetrachloroethene (PCE)	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
trans-1,2-DCE	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
trans-1,3-Dichloropropene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,2,3-Trichlorobenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,2,4-Trichlorobenzene	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,1,1-Trichloroethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
1,1,2-Trichloroethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Trichloroethene (TCE)	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Trichlorofluoromethane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 (19.5-20')
Project: SWMU NO.1
Collection Date: 10/2/2012 5:25:00 PM
Lab ID: 1210279-012
Matrix: SOIL
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Vinyl chloride	ND	0.00120		mg/Kg	1	10/8/2012 9:25:50 PM
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	10/8/2012 9:25:50 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	1	10/8/2012 9:25:50 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/8/2012 9:25:50 PM
Surr: Toluene-d8	90.5	70-130		%REC	1	10/8/2012 9:25:50 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100212
Project: SWMU NO.1
Collection Date: 10/2/2012 5:45:00 PM
Lab ID: 1210279-013
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/8/2012 11:26:09 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 11:26:09 AM
Surr: DNOP	118	79.5-166		%REC	1	10/8/2012 11:26:09 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/5/2012 6:49:39 PM
Surr: BFB	97.5	69.8-119		%REC	1	10/5/2012 6:49:39 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	ND	0.10		mg/L	1	10/4/2012 12:22:52 PM
Chloride	ND	0.50		mg/L	1	10/4/2012 12:22:52 PM
Sulfate	ND	0.50		mg/L	1	10/4/2012 12:22:52 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	10/10/2012 10:02:26 PM
Beryllium	ND	0.0020		mg/L	1	10/10/2012 10:02:26 PM
Cadmium	ND	0.0020		mg/L	1	10/10/2012 10:02:26 PM
Chromium	ND	0.0060		mg/L	1	10/10/2012 10:02:26 PM
Cobalt	ND	0.0060		mg/L	1	10/10/2012 10:02:26 PM
Iron	ND	0.020		mg/L	1	10/10/2012 10:02:26 PM
Manganese	ND	0.0020		mg/L	1	10/10/2012 10:02:26 PM
Nickel	ND	0.010		mg/L	1	10/10/2012 10:02:26 PM
Silver	ND	0.0050		mg/L	1	10/10/2012 10:02:26 PM
Vanadium	ND	0.050		mg/L	1	10/10/2012 10:02:26 PM
Zinc	ND	0.010		mg/L	1	10/12/2012 9:22:54 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/17/2012 12:40:00 PM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 12:40:00 PM
Lead	ND	0.0010		mg/L	1	10/17/2012 12:40:00 PM
Selenium	ND	0.0010		mg/L	1	10/17/2012 12:40:00 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/15/2012 6:15:26 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Acenaphthylene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Aniline	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Anthracene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Azobenzene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Benz(a)anthracene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/8/2012 7:29:47 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100212
Project: SWMU NO.1
Collection Date: 10/2/2012 5:45:00 PM
Lab ID: 1210279-013
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Benzoic acid	ND	20		µg/L	1	10/8/2012 7:29:47 PM
Benzyl alcohol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/8/2012 7:29:47 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Carbazole	ND	10		µg/L	1	10/8/2012 7:29:47 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
4-Chloroaniline	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2-Chlorophenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Chrysene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Dibenzofuran	ND	10		µg/L	1	10/8/2012 7:29:47 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Diethyl phthalate	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Dimethyl phthalate	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/8/2012 7:29:47 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/8/2012 7:29:47 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/8/2012 7:29:47 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Fluoranthene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Fluorene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Hexachlorobenzene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Hexachloroethane	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Isophorone	ND	10		µg/L	1	10/8/2012 7:29:47 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/8/2012 7:29:47 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100212
Project: SWMU NO.1
Collection Date: 10/2/2012 5:45:00 PM
Lab ID: 1210279-013
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
3+4-Methylphenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/8/2012 7:29:47 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/8/2012 7:29:47 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Naphthalene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2-Nitroaniline	ND	10		µg/L	1	10/8/2012 7:29:47 PM
3-Nitroaniline	ND	10		µg/L	1	10/8/2012 7:29:47 PM
4-Nitroaniline	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Nitrobenzene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2-Nitrophenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
4-Nitrophenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Pentachlorophenol	ND	20		µg/L	1	10/8/2012 7:29:47 PM
Phenanthrene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Phenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Pyrene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Pyridine	ND	10		µg/L	1	10/8/2012 7:29:47 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/8/2012 7:29:47 PM
Surr: 2,4,6-Tribromophenol	74.8	44.2-126		%REC	1	10/8/2012 7:29:47 PM
Surr: 2-Fluorobiphenyl	63.7	37-114		%REC	1	10/8/2012 7:29:47 PM
Surr: 2-Fluorophenol	60.4	23.4-98		%REC	1	10/8/2012 7:29:47 PM
Surr: 4-Terphenyl-d14	64.6	41.3-116		%REC	1	10/8/2012 7:29:47 PM
Surr: Nitrobenzene-d5	72.6	39.5-118		%REC	1	10/8/2012 7:29:47 PM
Surr: Phenol-d5	44.8	20.9-95.9		%REC	1	10/8/2012 7:29:47 PM
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Benzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Toluene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Ethylbenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Naphthalene	ND	2.0		µg/L	1	10/4/2012 11:20:42 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2012 11:20:42 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2012 11:20:42 PM
Acetone	ND	10		µg/L	1	10/4/2012 11:20:42 PM
Bromobenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100212
Project: SWMU NO.1
Collection Date: 10/2/2012 5:45:00 PM
Lab ID: 1210279-013
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Bromoform	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Bromomethane	ND	3.0		µg/L	1	10/4/2012 11:20:42 PM
2-Butanone	ND	10		µg/L	1	10/4/2012 11:20:42 PM
Carbon disulfide	ND	10		µg/L	1	10/4/2012 11:20:42 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Chlorobenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Chloroethane	ND	2.0		µg/L	1	10/4/2012 11:20:42 PM
Chloroform	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Chloromethane	ND	3.0		µg/L	1	10/4/2012 11:20:42 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/4/2012 11:20:42 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Dibromomethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/4/2012 11:20:42 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
2-Hexanone	ND	10		µg/L	1	10/4/2012 11:20:42 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/4/2012 11:20:42 PM
Methylene Chloride	ND	3.0		µg/L	1	10/4/2012 11:20:42 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/4/2012 11:20:42 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Styrene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/4/2012 11:20:42 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100212
Project: SWMU NO.1
Collection Date: 10/2/2012 5:45:00 PM
Lab ID: 1210279-013
Matrix: AQUEOUS
Received Date: 10/4/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/4/2012 11:20:42 PM
Vinyl chloride	ND	1.0		µg/L	1	10/4/2012 11:20:42 PM
Xylenes, Total	ND	1.5		µg/L	1	10/4/2012 11:20:42 PM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	10/4/2012 11:20:42 PM
Surr: 4-Bromofluorobenzene	112	70-130		%REC	1	10/4/2012 11:20:42 PM
Surr: Dibromofluoromethane	99.3	70-130		%REC	1	10/4/2012 11:20:42 PM
Surr: Toluene-d8	92.3	70-130		%REC	1	10/4/2012 11:20:42 PM

Qualifiers:

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

Anatek Labs, Inc.

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

Batch #: 121005049
Project Name: 1210279

Analytical Results Report

Sample Number 121005049-001 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-001D / SWMU 1-2 (6-8) **Sampling Time** 10:00 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	15.1	Percent		10/9/2012	KFG	%moisture	

Sample Number 121005049-002 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-002D / SWMU 1-2 (10-11) **Sampling Time** 10:20 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	19.8	Percent		10/9/2012	KFG	%moisture	

Sample Number 121005049-003 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-003D / SWMU 1-2 (14-16) **Sampling Time** 10:35 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	16.5	Percent		10/9/2012	KFG	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121005049
Project Name: 1210279

Analytical Results Report

Sample Number 121005049-004 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-004D / SWMU 1-2 (17-17.25) **Sampling Time** 10:50 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	19.3	Percent		10/9/2012	KFG	%moisture	

Sample Number 121005049-005 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-005D / SWMU 1-2 (19.5-20) **Sampling Time** 11:05 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	10.8	Percent		10/9/2012	KFG	%moisture	

Sample Number 121005049-006 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-006F / SWMU 1-2 GW **Sampling Time** 1:45 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0367	mg/L	0.01	10/16/2012	CRW	EPA 335.4	

Sample Number 121005049-007 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-008D / SWMU 1-3 (2-4) **Sampling Time** 4:20 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	11.4	Percent		10/9/2012	KFG	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121005049
Project Name: 1210279

Analytical Results Report

Sample Number 121005049-008 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-009D / SWMU 1-3 (10-11) **Sampling Time** 4:35 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	18.1	Percent		10/9/2012	KFG	%moisture	

Sample Number 121005049-009 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-010D / SWMU 1-3 (11-11.25) **Sampling Time** 4:50 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	17.5	Percent		10/9/2012	KFG	%moisture	

Sample Number 121005049-010 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-011D / SWMU 1-3 (18.5-19.5) **Sampling Time** 5:10 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	18.3	Percent		10/9/2012	KFG	%moisture	

Sample Number 121005049-011 **Sampling Date** 10/2/2012 **Date/Time Received** 10/5/2012 10:54 A
Client Sample ID 1210279-012D / SWMU 1-3 (19.5-20) **Sampling Time** 5:25 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	13.3	Percent		10/9/2012	KFG	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121005049
Project Name: 1210279

Analytical Results Report

Sample Number	121005049-012	**Sampling Date**	10/2/2012	**Date/Time Received**	10/5/2012 10:54 A
Client Sample ID	1210279-013F / EB100212			**Sampling Time**	5:45 PM
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/16/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

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

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

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **176939** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **176940** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.6	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.50	0.0020	0.5000	0	100	85	115			
Chromium	0.49	0.0060	0.5000	0	97.3	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.2	85	115			
Iron	0.49	0.020	0.5000	0	98.1	85	115			
Manganese	0.49	0.0020	0.5000	0	97.7	85	115			
Nickel	0.47	0.010	0.5000	0	94.9	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			

Sample ID **1210368-001BMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177005** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0.02430	96.8	70	130			
Beryllium	0.51	0.0020	0.5000	0	102	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.8	70	130			

Sample ID **1210368-001BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177006** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0.02430	97.1	70	130	0.302	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210368-001BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177006** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.52	0.0020	0.5000	0	103	70	130	0.724	20	
Cadmium	0.50	0.0020	0.5000	0	99.0	70	130	1.24	20	

Sample ID **MB-4223** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4223** RunNo: **6141**
Prep Date: **10/10/2012** Analysis Date: **10/10/2012** SeqNo: **177028** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS-4223** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **4223** RunNo: **6141**
Prep Date: **10/10/2012** Analysis Date: **10/10/2012** SeqNo: **177029** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	99.0	85	115			
Beryllium	0.52	0.0020	0.5000	0	104	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	98.2	85	115			
Cobalt	0.49	0.0060	0.5000	0	97.1	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	98.3	85	115			
Nickel	0.48	0.010	0.5000	0	96.2	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Vanadium	0.51	0.050	0.5000	0	102	85	115			
Zinc	0.49	0.010	0.5000	0	97.9	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178907** Units: **mg/L**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA Method 200.7: Metals**				
Client ID:	**PBW**	Batch ID:	**R6212**		RunNo:	**6212**				
Prep Date:		Analysis Date:	**10/12/2012**		SeqNo:	**178907**	Units:	**mg/L**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc		ND	0.010								

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA Method 200.7: Metals**				
Client ID:	**LCSW**	Batch ID:	**R6212**		RunNo:	**6212**				
Prep Date:		Analysis Date:	**10/12/2012**		SeqNo:	**178908**	Units:	**mg/L**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc		0.51	0.010	0.5000	0	101	85	115			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4223** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **4223** RunNo: **6249**
Prep Date: **10/10/2012** Analysis Date: **10/15/2012** SeqNo: **179959** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								
Selenium	ND	0.0025								

Sample ID **1210046-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181878** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.027	0.0010	0.02500	0.001891	99.5	70	130			

Sample ID **1210367-001BMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181885** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.6	70	130			
Arsenic	0.035	0.0010	0.02500	0.01018	101	70	130			
Selenium	0.031	0.0010	0.02500	0.005490	104	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181905** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.9	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181906** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.6	85	115			
Selenium	0.027	0.0010	0.02500	0	106	85	115			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181907** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.7	85	115			
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181909** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181910** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181911** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1210585-001CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181948** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	70	130			
Arsenic	0.026	0.0010	0.02500	0	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210585-001CMS**	SampType:	**MS**	TestCode:	**EPA 200.8: Metals**
Client ID:	**BatchQC**	Batch ID:	**R6315**	RunNo:	**6315**
Prep Date:		Analysis Date:	**10/17/2012**	SeqNo:	**181948** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.025	0.0010	0.02500	0	99.7	70	130			
Selenium	0.026	0.0010	0.02500	0	105	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4279** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179065** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-4279** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179066** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.0	80	120			

Sample ID **1210332-010EMS** SampType: **MS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179069** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.9	75	125			

Sample ID **1210332-010EMSD** SampType: **MSD** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179072** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.7	75	125	0.749	20	

Sample ID **MB-4303** SampType: **mblk** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **4303** RunNo: **6268**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **180618** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-4303** SampType: **lcs** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **4303** RunNo: **6268**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **180619** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	95.8	80	120			

Sample ID **1210352-007BMS** SampType: **ms** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4303** RunNo: **6268**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **180639** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	93.6	75	125			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210352-007BMSD**	SampType:	**msd**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**BatchQC**	Batch ID:	**4303**	RunNo:	**6268**
Prep Date:	**10/15/2012**	Analysis Date:	**10/15/2012**	SeqNo:	**180642** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	94.2	75	125	0.680	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R5979** RunNo: **5979**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172224** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R5979** RunNo: **5979**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172225** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.52	0.10	0.5000	0	103	90	110			
Chloride	5.0	0.50	5.000	0	99.2	90	110			
Sulfate	9.2	0.50	10.00	0	91.9	90	110			

Sample ID **1210279-013GMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB100212** Batch ID: **R5979** RunNo: **5979**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172240** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.50	0.10	0.5000	0	100	76.6	110			
Chloride	4.7	0.50	5.000	0	94.0	87.8	111			

Sample ID **1210279-013GMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB100212** Batch ID: **R5979** RunNo: **5979**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172241** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.50	0.10	0.5000	0	101	76.6	110	0.119	20	
Chloride	4.7	0.50	5.000	0	93.6	87.8	111	0.433	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R5996** RunNo: **5996**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172794** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R5996** RunNo: **5996**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172795** Units: **mg/L**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R5996** RunNo: **5996**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172795** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	96.0	90	110			
Sulfate	9.7	0.50	10.00	0	96.6	90	110			

Sample ID **1210285-001EMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R5996** RunNo: **5996**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172807** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.77	0.10	0.5000	0	155	76.6	110			S

Sample ID **1210285-001EMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R5996** RunNo: **5996**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172808** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.78	0.10	0.5000	0	155	76.6	110	0.271	20	S

Sample ID **1210300-001BMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R5996** RunNo: **5996**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172812** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	15	0.50	10.00	8.924	62.0	84.6	122			S

Sample ID **1210300-001BMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R5996** RunNo: **5996**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172813** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	15	0.50	10.00	8.924	62.3	84.6	122	0.201	20	S

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R5996** RunNo: **5996**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **172858** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Sulfate	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSW**	Batch ID:	**R5996**	RunNo:	**5996**					
Prep Date:		Analysis Date:	**10/5/2012**	SeqNo:	**172859**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride		0.51	0.10	0.5000	0	102	90	110			
Sulfate		9.8	0.50	10.00	0	97.9	90	110			

Sample ID	**1210301-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID:	**R5996**	RunNo:	**5996**					
Prep Date:		Analysis Date:	**10/5/2012**	SeqNo:	**172863**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride		1.4	0.10	0.5000	0.8809	97.3	76.6	110			

Sample ID	**1210301-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID:	**R5996**	RunNo:	**5996**					
Prep Date:		Analysis Date:	**10/5/2012**	SeqNo:	**172864**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride		1.4	0.10	0.5000	0.8809	97.0	76.6	110	0.110	20	

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBW**	Batch ID:	**R6149**	RunNo:	**6149**					
Prep Date:		Analysis Date:	**10/10/2012**	SeqNo:	**177130**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	0.50								

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSW**	Batch ID:	**R6149**	RunNo:	**6149**					
Prep Date:		Analysis Date:	**10/10/2012**	SeqNo:	**177131**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.9	0.50	5.000	0	98.3	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210279-012CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-3 (19.5-20')** Batch ID: **4138** RunNo: **6027**
Prep Date: **10/5/2012** Analysis Date: **10/7/2012** SeqNo: **173631** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	51.28	0	80.5	57.2	146			
Surr: DNOP	4.1		5.128		79.6	77.6	140			

Sample ID **1210279-012CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-3 (19.5-20')** Batch ID: **4138** RunNo: **6027**
Prep Date: **10/5/2012** Analysis Date: **10/7/2012** SeqNo: **173633** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.97	0	77.2	57.2	146	4.84	24.5	
Surr: DNOP	4.0		5.097		77.7	77.6	140	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4137** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **PBW** Batch ID: **4137** RunNo: **6039**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **174081** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		108	79.5	166			

Sample ID **LCS-4137** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSW** Batch ID: **4137** RunNo: **6039**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **174082** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.2	1.0	5.000	0	104	74	157			
Surr: DNOP	0.45		0.5000		90.2	79.5	166			

Sample ID **LCSD-4137** SampType: **LCSD** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSS02** Batch ID: **4137** RunNo: **6039**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **174083** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	109	74	157	5.45	23	
Surr: DNOP	0.45		0.5000		90.8	79.5	166	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4015** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4015** RunNo: **6019**
Prep Date: **10/1/2012** Analysis Date: **10/5/2012** SeqNo: **173412** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	84	116			

Sample ID **LCS-4015** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4015** RunNo: **6019**
Prep Date: **10/1/2012** Analysis Date: **10/5/2012** SeqNo: **173413** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	74	117			
Surr: BFB	1000		1000		103	84	116			

Sample ID **1210002-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4015** RunNo: **6019**
Prep Date: **10/1/2012** Analysis Date: **10/5/2012** SeqNo: **173418** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.61	0	106	70	130			
Surr: BFB	1100		984.3		108	84	116			

Sample ID **1210002-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4015** RunNo: **6019**
Prep Date: **10/1/2012** Analysis Date: **10/5/2012** SeqNo: **173419** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.61	0	97.4	70	130	8.23	22.1	
Surr: BFB	1100		984.3		110	84	116	0	0	

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **173460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **173461** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.0	74	117			
Surr: BFB	820		1000		82.5	84	116			S

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210279-011BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-3 (18.5-19.** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **173465** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	12	5.0	15.46	0	78.9	70	130			
Surr: BFB	670		618.5		108	84	116			

Sample ID **1210279-011BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-3 (18.5-19.** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **173466** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	5.0	15.46	0	90.8	70	130	14.0	22.1	
Surr: BFB	650		618.5		105	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R6020**	RunNo:	**6020**
Prep Date:		Analysis Date:	**10/5/2012**	SeqNo:	**173451** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	21		20.00		104	69.8	119			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBS**	Batch ID: **R6144**	RunNo: **6144**			
Prep Date:	Analysis Date: **10/10/2012**	SeqNo: **177071**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R6144** RunNo: **6144**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177071** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.39		0.5000		78.8	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130			
Surr: Toluene-d8	0.42		0.5000		84.4	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R6144** RunNo: **6144**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177073** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	99.1	70	130			
Toluene	0.98	0.050	1.000	0	98.5	80	120			
Chlorobenzene	0.93	0.050	1.000	0	92.7	70	130			
1,1-Dichloroethene	1.0	0.050	1.000	0	104	74	124			
Trichloroethene (TCE)	0.92	0.050	1.000	0	92.3	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.40		0.5000		79.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R6144** RunNo: **6144**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177073** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.42		0.5000		83.9	70	130			

Sample ID **1210279-001B MS** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 1-2 (6-8')** Batch ID: **R6144** RunNo: **6144**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177076** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6719	0	99.5	80.9	118			
Toluene	0.57	0.050	0.6719	0	84.7	69.5	119			
Chlorobenzene	0.60	0.050	0.6719	0	89.8	75.7	115			
1,1-Dichloroethene	0.68	0.050	0.6719	0	101	68.6	126			
Trichloroethene (TCE)	0.65	0.050	0.6719	0	97.0	68.7	115			
Surr: 1,2-Dichloroethane-d4	0.29		0.3360		87.7	70	130			
Surr: 4-Bromofluorobenzene	0.26		0.3360		78.3	70	130			
Surr: Dibromofluoromethane	0.35		0.3360		103	70	130			
Surr: Toluene-d8	0.25		0.3360		74.4	70	130			

Sample ID **1210279-001B MSD** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 1-2 (6-8')** Batch ID: **R6144** RunNo: **6144**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177077** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.68	0.050	0.6719	0	101	80.9	118	1.54	20	
Toluene	0.58	0.050	0.6719	0	85.9	69.5	119	1.42	20	
Chlorobenzene	0.63	0.050	0.6719	0	93.1	75.7	115	3.54	20	
1,1-Dichloroethene	0.68	0.050	0.6719	0	101	68.6	126	0.179	24.8	
Trichloroethene (TCE)	0.65	0.050	0.6719	0	97.2	68.7	115	0.171	20	
Surr: 1,2-Dichloroethane-d4	0.30		0.3360		89.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.25		0.3360		73.6	70	130	0	0	
Surr: Dibromofluoromethane	0.39		0.3360		117	70	130	0	0	
Surr: Toluene-d8	0.24		0.3360		72.6	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4139**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4139**	RunNo: **6123**			
Prep Date: **10/5/2012**	Analysis Date: **10/8/2012**	SeqNo: **176473**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4139** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4139** RunNo: **6123**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **176473** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.5		50.00		86.9	70	130			
Surr: 4-Bromofluorobenzene	48.2		50.00		96.4	70	130			
Surr: Dibromofluoromethane	51.1		50.00		102	70	130			
Surr: Toluene-d8	48.6		50.00		97.1	70	130			

Sample ID **lcs-4139** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4139** RunNo: **6123**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **176475** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	10.6	1.00	10.00	0	106	60	140			
Toluene	9.55	1.00	10.00	0	95.5	60	140			
Chlorobenzene	9.91	1.00	10.00	0	99.1	60	140			
1,1-Dichloroethene	11.6	1.00	10.00	0	116	60	140			
Trichloroethene (TCE)	9.40	1.00	10.00	0	94.0	60	140			
Surr: 1,2-Dichloroethane-d4	45.7		50.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	39.6		50.00		79.3	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4139**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4139**	RunNo:	**6123**
Prep Date:	**10/5/2012**	Analysis Date:	**10/8/2012**	SeqNo:	**176475** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	49.3		50.00		98.5	70	130			
Surr: Toluene-d8	47.1		50.00		94.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R5993**	RunNo: **5993**			
Prep Date:	Analysis Date: **10/4/2012**	SeqNo: **172673**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R5993** RunNo: **5993**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172673** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.4	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.1	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R5993** RunNo: **5993**
Prep Date: Analysis Date: **10/4/2012** SeqNo: **172697** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.9	70	130			
Toluene	22	1.0	20.00	0	112	80	120			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	101	73.7	122			
Trichloroethene (TCE)	22	1.0	20.00	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**100ng lcs**	SampType:	**LCS**	TestCode:	**EPA Method 8260B: VOLATILES**
Client ID:	**LCSW**	Batch ID:	**R5993**	RunNo:	**5993**
Prep Date:		Analysis Date:	**10/4/2012**	SeqNo:	**172697** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.6		10.00		95.7	70	130			
Surr: Toluene-d8	10		10.00		99.5	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4140**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4140**	RunNo: **6106**			
Prep Date: **10/5/2012**	Analysis Date: **10/9/2012**	SeqNo: **176018**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4140** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176018** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.3		3.330		68.7	21.3	145			
Surr: 2-Fluorobiphenyl	0.94		1.670		56.2	20	131			
Surr: 2-Fluorophenol	2.0		3.330		59.6	11.9	130			
Surr: 4-Terphenyl-d14	0.96		1.670		57.5	25.1	149			
Surr: Nitrobenzene-d5	1.0		1.670		59.9	25.6	137			
Surr: Phenol-d5	2.1		3.330		62.9	20.3	132			

Sample ID **lcs-4140** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176019** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4140** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176019** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.99	0.20	1.670	0	59.5	49.7	98.1			
4-Chloro-3-methylphenol	2.2	0.50	3.330	0	65.1	43.8	89.1			
2-Chlorophenol	1.9	0.20	3.330	0	57.0	41.1	96.9			
1,4-Dichlorobenzene	0.91	0.20	1.670	0	54.6	41	97.4			
2,4-Dinitrotoluene	1.2	0.50	1.670	0	70.7	44.4	104			
N-Nitrosodi-n-propylamine	1.1	0.20	1.670	0	65.0	39.1	86.9			
4-Nitrophenol	2.1	0.25	3.330	0	62.6	44.2	107			
Pentachlorophenol	1.5	0.40	3.330	0	44.9	36.2	80			
Phenol	2.0	0.20	3.330	0	60.0	42.7	92.7			
Pyrene	0.90	0.20	1.670	0	53.9	34.7	98.8			
1,2,4-Trichlorobenzene	0.88	0.20	1.670	0	52.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.5		3.330		74.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.1		1.670		66.2	20	131			
Surr: 2-Fluorophenol	1.9		3.330		55.8	11.9	130			
Surr: 4-Terphenyl-d14	1.1		1.670		64.8	25.1	149			
Surr: Nitrobenzene-d5	1.0		1.670		60.3	25.6	137			
Surr: Phenol-d5	2.1		3.330		63.6	20.3	132			

Sample ID **1210279-012CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-3 (19.5-20')** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176040** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.20	1.684	0	76.6	38.6	100			
4-Chloro-3-methylphenol	2.7	0.50	3.358	0	79.2	35.8	108			
2-Chlorophenol	2.4	0.20	3.358	0	72.3	48.2	96.1			
1,4-Dichlorobenzene	1.1	0.20	1.684	0	66.4	42.5	97.6			
2,4-Dinitrotoluene	1.6	0.50	1.684	0	92.4	51.2	108			
N-Nitrosodi-n-propylamine	1.1	0.20	1.684	0	67.5	31.6	114			
4-Nitrophenol	2.8	0.25	3.358	0	82.3	22.7	144			
Pentachlorophenol	2.1	0.40	3.358	0	61.1	24	109			
Phenol	2.6	0.20	3.358	0	76.4	33.1	108			
Pyrene	1.2	0.20	1.684	0	69.2	42.7	98.9			
1,2,4-Trichlorobenzene	1.1	0.20	1.684	0	64.3	27.1	118			
Surr: 2,4,6-Tribromophenol	2.9		3.358		86.1	21.3	145			
Surr: 2-Fluorobiphenyl	1.2		1.684		73.8	20	131			
Surr: 2-Fluorophenol	2.5		3.358		75.3	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.684		70.1	25.1	149			
Surr: Nitrobenzene-d5	1.2		1.684		73.1	25.6	137			
Surr: Phenol-d5	2.7		3.358		79.5	20.3	132			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210279-012CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-3 (19.5-20')** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176041** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.667	0	74.1	38.6	100	4.39	20	
4-Chloro-3-methylphenol	2.7	0.50	3.324	0	82.1	35.8	108	2.56	20	
2-Chlorophenol	2.3	0.20	3.324	0	68.8	48.2	96.1	5.93	20	
1,4-Dichlorobenzene	1.0	0.20	1.667	0	62.1	42.5	97.6	7.84	20	
2,4-Dinitrotoluene	1.6	0.50	1.667	0	95.5	51.2	108	2.29	20	
N-Nitrosodi-n-propylamine	1.1	0.20	1.667	0	66.7	31.6	114	2.25	20	
4-Nitrophenol	2.9	0.25	3.324	0	88.4	22.7	144	6.14	20	
Pentachlorophenol	2.1	0.40	3.324	0	64.0	24	109	3.56	20	
Phenol	2.3	0.20	3.324	0	69.6	33.1	108	10.3	20	
Pyrene	1.2	0.20	1.667	0	71.4	42.7	98.9	2.04	20	
1,2,4-Trichlorobenzene	1.1	0.20	1.667	0	66.7	27.1	118	2.65	20	
Surr: 2,4,6-Tribromophenol	3.0		3.324		89.8	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.2		1.667		71.8	20	131	0	0	
Surr: 2-Fluorophenol	2.4		3.324		72.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.2		1.667		72.5	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.3		1.667		76.8	25.6	137	0	0	
Surr: Phenol-d5	2.6		3.324		77.9	20.3	132	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4129**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4129**	RunNo: **6065**			
Prep Date: **10/5/2012**	Analysis Date: **10/8/2012**	SeqNo: **174758**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4129**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4129**	RunNo: **6065**			
Prep Date: **10/5/2012**	Analysis Date: **10/8/2012**	SeqNo: **174758**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	180		200.0		88.6	44.2	126			
Surr: 2-Fluorobiphenyl	74		100.0		73.9	37	114			
Surr: 2-Fluorophenol	140		200.0		70.6	23.4	98			
Surr: 4-Terphenyl-d14	77		100.0		76.8	41.3	116			
Surr: Nitrobenzene-d5	90		100.0		89.6	39.5	118			
Surr: Phenol-d5	110		200.0		54.8	20.9	95.9			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4129** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **4129** RunNo: **6065**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **174759** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	69	10	100.0	0	68.6	38.2	99.4			
4-Chloro-3-methylphenol	170	10	200.0	0	82.8	35.5	108			
2-Chlorophenol	150	10	200.0	0	75.2	29.8	106			
1,4-Dichlorobenzene	59	10	100.0	0	58.6	32.6	91.5			
2,4-Dinitrotoluene	87	10	100.0	0	87.2	44.7	112			
N-Nitrosodi-n-propylamine	74	10	100.0	0	73.7	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	110	20	200.0	0	55.9	20.2	93			
Phenol	96	10	200.0	0	48.1	23	66.1			
Pyrene	67	10	100.0	0	67.3	40.1	101			
1,2,4-Trichlorobenzene	63	10	100.0	0	63.3	37.7	99.1			
Surr: 2,4,6-Tribromophenol	180		200.0		88.8	44.2	126			
Surr: 2-Fluorobiphenyl	65		100.0		65.2	37	114			
Surr: 2-Fluorophenol	120		200.0		61.3	23.4	98			
Surr: 4-Terphenyl-d14	69		100.0		68.7	41.3	116			
Surr: Nitrobenzene-d5	78		100.0		78.2	39.5	118			
Surr: Phenol-d5	110		200.0		52.5	20.9	95.9			

Sample ID **lcsd-4129** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **4129** RunNo: **6065**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **174760** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	70.5	38.2	99.4	2.79	20	
4-Chloro-3-methylphenol	170	10	200.0	0	85.2	35.5	108	2.83	20	
2-Chlorophenol	150	10	200.0	0	74.9	29.8	106	0.386	20	
1,4-Dichlorobenzene	60	10	100.0	0	59.7	32.6	91.5	1.93	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.1	44.7	112	4.31	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.7	38.5	105	1.27	20	
4-Nitrophenol	100	10	200.0	0	50.7	11.6	73.1	6.98	20	
Pentachlorophenol	110	20	200.0	0	55.9	20.2	93	0.0536	20	
Phenol	89	10	200.0	0	44.7	23	66.1	7.41	20	
Pyrene	74	10	100.0	0	74.0	40.1	101	9.37	20	
1,2,4-Trichlorobenzene	64	10	100.0	0	63.9	37.7	99.1	0.943	20	
Surr: 2,4,6-Tribromophenol	170		200.0		84.4	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	65		100.0		65.0	37	114	0	0	
Surr: 2-Fluorophenol	110		200.0		55.6	23.4	98	0	0	
Surr: 4-Terphenyl-d14	75		100.0		75.1	41.3	116	0	0	
Surr: Nitrobenzene-d5	76		100.0		76.1	39.5	118	0	0	
Surr: Phenol-d5	94		200.0		47.1	20.9	95.9	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4086** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4086** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175476** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4086** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4086** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175477** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	104	80	120			

Sample ID **1210279-008CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-3 (2-4')** Batch ID: **4086** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175510** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.15	0.033	0.1665	0.01287	84.9	75	125			

Sample ID **1210279-008CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-3 (2-4')** Batch ID: **4086** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175511** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.15	0.033	0.1686	0.01287	82.8	75	125	1.08	20	

Sample ID **MB-4150** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4150** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175512** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4150** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4150** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175513** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1667	0	117	80	120			

Sample ID **1210332-015CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4150** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175534** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1635	0	108	75	125			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210332-015CMSD**	SampType:	**MSD**	TestCode:	**EPA Method 7471: Mercury**
Client ID:	**BatchQC**	Batch ID:	**4150**	RunNo:	**6082**
Prep Date:	**10/8/2012**	Analysis Date:	**10/9/2012**	SeqNo:	**175535** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1662	0	108	75	125	1.95	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4300** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4300** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181006** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4300** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4300** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181012** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0.9150	90.4	80	120			
Arsenic	27	2.5	25.00	0	107	80	120			
Barium	25	0.10	25.00	0	101	80	120			
Beryllium	27	0.15	25.00	0	108	80	120			
Cadmium	26	0.10	25.00	0	104	80	120			
Chromium	25	0.30	25.00	0	100	80	120			
Cobalt	25	0.30	25.00	0	100	80	120			
Lead	26	0.25	25.00	0	103	80	120			
Manganese	25	0.10	25.00	0.05000	99.4	80	120			
Nickel	25	0.50	25.00	0	99.0	80	120			
Selenium	26	2.5	25.00	0	105	80	120			
Silver	5.2	0.25	5.000	0	104	80	120			
Vanadium	26	2.5	25.00	0	103	80	120			
Zinc	26	2.5	25.00	0	104	80	120			

Sample ID **MB-4300** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4300** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181592** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS-4300** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4300** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181593** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	108	80	120			

Sample ID **1210583-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4300** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181667** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	25	0.75	24.84	0.8953	96.7	75	125			
Cadmium	22	0.50	24.84	0	90.2	75	125			
Chromium	31	1.5	24.84	12.41	74.0	75	125			S
Cobalt	26	1.5	24.84	5.546	80.5	75	125			
Lead	26	1.3	24.84	5.875	81.9	75	125			
Nickel	29	2.5	24.84	8.319	83.0	75	125			
Silver	4.6	1.3	4.967	0	92.2	75	125			
Vanadium	47	13	24.84	25.45	86.0	75	125			
Zinc	49	13	24.84	33.40	64.7	75	125			S

Sample ID **1210583-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4300** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181668** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	26	0.75	24.89	0.8953	101	75	125	4.27	20	
Cadmium	23	0.50	24.89	0	94.2	75	125	4.55	20	
Chromium	33	1.5	24.89	12.41	83.0	75	125	7.15	20	
Cobalt	27	1.5	24.89	5.546	85.8	75	125	5.17	20	
Lead	28	1.2	24.89	5.875	87.0	75	125	4.93	20	
Nickel	30	2.5	24.89	8.319	88.6	75	125	4.90	20	
Silver	4.9	1.2	4.978	0	98.0	75	125	6.31	20	
Vanadium	48	12	24.89	25.45	91.4	75	125	2.90	20	
Zinc	58	12	24.89	33.40	98.3	75	125	15.6	20	

Sample ID **1210583-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4300** RunNo: **6437**
Prep Date: **10/15/2012** Analysis Date: **10/23/2012** SeqNo: **185157** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.84	0	30.6	75	125			S
Arsenic	25	12	24.84	0	102	75	125			
Selenium	13	12	24.84	0	53.6	75	125			S

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210279**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210583-001CMSD**	SampType:	**MSD**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**BatchQC**	Batch ID:	**4300**	RunNo:	**6437**
Prep Date:	**10/15/2012**	Analysis Date:	**10/23/2012**	SeqNo:	**185160** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.89	0	34.4	75	125	0	20	S
Arsenic	26	12	24.89	0	105	75	125	3.33	20	
Selenium	16	12	24.89	0	62.7	75	125	16.0	20	S

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Western Refining Gallup — Work Order Number: 1210279

Received by/date: MA 10/04/12

Logged By: **Ashley Gallegos** 10/4/2012 8:00:00 AM

Completed By: **Ashley Gallegos** 10/4/2012 9:13:43 AM

Reviewed By: IO 10/04/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? ~~Yes ☑ No ☐~~
10. Was preservative added to bottles? Yes ☑ ~~No ☑~~ NA ☐

006E-ADDED 3mL HNO3 FOR ACCEPTABLE pH - 006F-ADDED 2 PELLETS NaOH FOR ACCEPTABLE pH

11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

10/04/12

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

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SOUTHWEST, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.6°

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210279	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
~~10/2/12~~	~~1000~~	~~SOIL~~	~~SWMU 1-2 (6-8')~~																			
10/2/12	1000	SOIL	SWMU 1-2 (6-8')	2 VIALS	SOBI	-001										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1020		SWMU 1-2 (10-11')	2 VIALS	SOBI	-002										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1035		SWMU 1-2 (14-16')	2 VIALS	SOBI	-003										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1050		SWMU 1-2 (17-17.25')	2 VIALS	SOBI	-004										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

Date	Time	Relinquished by	Received by	Date	Time
10/3/12	0707	[illegible]	[illegible]	10/04/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.6°

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210279	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/2/12	1105	SOIL	SWMU 1-2 (19.5-20)	2 VIALS	8081	-005										X						
				2 VIALS	MEOH											X						
				2 JARS	—											X	X	X	X			
	1345	GW	SWMU 1-2 GW	6 VOA	HCL/NEAT	-006										X						
				1 L AMBER	—												X					
				PLASTIC	—														X			
				PLASTIC	HNO_3														X			
				PLASTIC	NAOH														X			
10/2/12	—	WATER	TRIP BLANK	3 VOA	HCL	-007										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/3/12	0707	[signature]	Michelle Garcia	10/04/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210279	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH + MRO & DRO	METALS			Air Bubbles (Y or N)
10/2/12	1620	SOIL	SWMU 1-3 (2-4')	2 VIALS	SOBI	-008										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1635		SWMU 1-3 (10-11')	2 VIALS	SOBI	-009										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1650		SWMU 1-3 (11-11.25')	2 VIALS	SOBI	-010										X						
				2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			
	1710		SWMU 1-3 (18.5-19.5')	2 VIALS	SOBI	-011										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date Time
10/3/12	0711	[signature]	[signature]	10/04/12 0800
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks:

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

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210279	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH + MRO & DRO	METALS			Air Bubbles (Y or N)
10/2/12	1725	SOIL	SWMU 1-3(19.5-20)	2 VIALS	SOBI	-012										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1745	WATER	EB100212	6 VOA	HCL/NEAT	-013										X						
				1 AMBER	—												X					
				1 PLASTIC	—														X			
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			

Date:	Time:	Relinquished by:	Received by:	Date Time
10/3/12	0711	[signature]	[signature]	10/04/12 0800
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks:

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

November 14, 2012

Scott Crouch
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210332

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 15 sample(s) on 10/5/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued October 29, 2012.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210332**
Date Reported: **11/14/2012**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')DUP
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-001
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/8/2012 9:31:27 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/8/2012 9:31:27 AM
Surr: DNOP	95.9	77.6-140		%REC	1	10/8/2012 9:31:27 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 5:39:05 PM
Surr: BFB	108	84-116		%REC	1	10/6/2012 5:39:05 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:08:22 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 9:55:44 AM
Arsenic	ND	12		mg/Kg	5	10/11/2012 9:55:44 AM
Barium	870	5.0		mg/Kg	50	10/11/2012 11:42:40 AM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 9:55:44 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 9:55:44 AM
Chromium	6.4	1.5		mg/Kg	5	10/11/2012 9:55:44 AM
Cobalt	3.1	1.5		mg/Kg	5	10/11/2012 9:55:44 AM
Iron	9200	500		mg/Kg	500	10/11/2012 11:45:05 AM
Lead	4.4	1.2		mg/Kg	5	10/11/2012 9:55:44 AM
Manganese	1400	5.0		mg/Kg	50	10/11/2012 11:42:40 AM
Nickel	5.0	2.5		mg/Kg	5	10/11/2012 9:55:44 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 9:55:44 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 9:55:44 AM
Vanadium	19	12		mg/Kg	5	10/11/2012 9:55:44 AM
Zinc	ND	12		mg/Kg	5	10/11/2012 9:55:44 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Benzoic acid	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')DUP
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-001
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 7:22:09 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 7:22:09 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 7:22:09 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 7:22:09 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 7:22:09 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 7:22:09 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Isophorone	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
2-Methylphenol	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')DUP
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-001
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 7:22:09 PM
Nitrobenzene	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 7:22:09 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 7:22:09 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Pyridine	ND	0.49		mg/Kg	1	10/9/2012 7:22:09 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 7:22:09 PM
Surr: 2,4,6-Tribromophenol	83.5	21.3-145		%REC	1	10/9/2012 7:22:09 PM
Surr: 2-Fluorobiphenyl	75.5	20-131		%REC	1	10/9/2012 7:22:09 PM
Surr: 2-Fluorophenol	80.0	11.9-130		%REC	1	10/9/2012 7:22:09 PM
Surr: 4-Terphenyl-d14	66.4	25.1-149		%REC	1	10/9/2012 7:22:09 PM
Surr: Nitrobenzene-d5	73.6	25.6-137		%REC	1	10/9/2012 7:22:09 PM
Surr: Phenol-d5	83.3	20.3-132		%REC	1	10/9/2012 7:22:09 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Toluene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Ethylbenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Xylenes, Total	ND	0.00197		mg/Kg	1	10/8/2012 9:56:35 PM
Methyl tert-butyl ether (MTBE)	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,2,4-Trimethylbenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,3,5-Trimethylbenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,2-Dichloroethane (EDC)	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,2-Dibromoethane (EDB)	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Naphthalene	ND	0.00197		mg/Kg	1	10/8/2012 9:56:35 PM
1-Methylnaphthalene	ND	0.00395		mg/Kg	1	10/8/2012 9:56:35 PM
2-Methylnaphthalene	ND	0.00395		mg/Kg	1	10/8/2012 9:56:35 PM
Acetone	0.0116	0.00986		mg/Kg	1	10/8/2012 9:56:35 PM
Bromobenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Bromodichloromethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Bromoform	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Bromomethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
2-Butanone	ND	0.00986		mg/Kg	1	10/8/2012 9:56:35 PM
Carbon tetrachloride	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Chlorobenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Chloroethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')DUP
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-001
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Chloromethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
2-Chlorotoluene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Carbon disulfide	ND	0.00986		mg/Kg	1	10/8/2012 9:56:35 PM
4-Chlorotoluene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
cis-1,2-DCE	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
cis-1,3-Dichloropropene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,2-Dibromo-3-chloropropane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Dibromochloromethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Dibromomethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,2-Dichlorobenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,3-Dichlorobenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,4-Dichlorobenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Dichlorodifluoromethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,1-Dichloroethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,1-Dichloroethene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,2-Dichloropropane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,3-Dichloropropane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
2,2-Dichloropropane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,1-Dichloropropene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Hexachlorobutadiene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Isopropylbenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
4-Isopropyltoluene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Methylene chloride	ND	0.00296		mg/Kg	1	10/8/2012 9:56:35 PM
n-Butylbenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
2-Hexanone	ND	0.00986		mg/Kg	1	10/8/2012 9:56:35 PM
n-Propylbenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
sec-Butylbenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Styrene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
4-Methyl-2-pentanone	ND	0.00986		mg/Kg	1	10/8/2012 9:56:35 PM
tert-Butylbenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,1,1,2-Tetrachloroethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,1,2,2-Tetrachloroethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Tetrachloroethene (PCE)	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
trans-1,2-DCE	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
trans-1,3-Dichloropropene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,2,3-Trichlorobenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,2,4-Trichlorobenzene	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,1,1-Trichloroethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
1,1,2-Trichloroethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Trichloroethene (TCE)	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Trichlorofluoromethane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')DUP
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-001
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Vinyl chloride	ND	0.000986		mg/Kg	1	10/8/2012 9:56:35 PM
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	10/8/2012 9:56:35 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	1	10/8/2012 9:56:35 PM
Surr: Dibromofluoromethane	91.9	70-130		%REC	1	10/8/2012 9:56:35 PM
Surr: Toluene-d8	92.7	70-130		%REC	1	10/8/2012 9:56:35 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (17-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:45:00 PM
Lab ID: 1210332-002
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/6/2012 9:43:43 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/6/2012 9:43:43 PM
Surr: DNOP	91.0	77.6-140		%REC	1	10/6/2012 9:43:43 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	13	5.0		mg/Kg	1	10/6/2012 6:09:29 PM
Surr: BFB	105	84-116		%REC	1	10/6/2012 6:09:29 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:10:08 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 10:00:49 AM
Arsenic	ND	12		mg/Kg	5	10/11/2012 10:00:49 AM
Barium	370	5.0		mg/Kg	50	10/11/2012 11:48:01 AM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 10:00:49 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 10:00:49 AM
Chromium	7.9	1.5		mg/Kg	5	10/11/2012 10:00:49 AM
Cobalt	3.9	1.5		mg/Kg	5	10/11/2012 10:00:49 AM
Iron	10000	500		mg/Kg	500	10/11/2012 11:50:28 AM
Lead	2.7	1.2		mg/Kg	5	10/11/2012 10:00:49 AM
Manganese	570	5.0		mg/Kg	50	10/11/2012 11:48:01 AM
Nickel	6.0	2.5		mg/Kg	5	10/11/2012 10:00:49 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 10:00:49 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 10:00:49 AM
Vanadium	17	12		mg/Kg	5	10/11/2012 10:00:49 AM
Zinc	17	12		mg/Kg	5	10/11/2012 10:00:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (17-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:45:00 PM
Lab ID: 1210332-002
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 7:51:52 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 7:51:52 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 7:51:52 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 7:51:52 PM
2,4-Dimethylphenol	0.64	0.30		mg/Kg	1	10/9/2012 7:51:52 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 7:51:52 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
2-Methylnaphthalene	0.27	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (17-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:45:00 PM
Lab ID: 1210332-002
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 7:51:52 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 7:51:52 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 7:51:52 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 7:51:52 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 7:51:52 PM
Surr: 2,4,6-Tribromophenol	109	21.3-145		%REC	1	10/9/2012 7:51:52 PM
Surr: 2-Fluorobiphenyl	93.8	20-131		%REC	1	10/9/2012 7:51:52 PM
Surr: 2-Fluorophenol	99.7	11.9-130		%REC	1	10/9/2012 7:51:52 PM
Surr: 4-Terphenyl-d14	79.3	25.1-149		%REC	1	10/9/2012 7:51:52 PM
Surr: Nitrobenzene-d5	97.5	25.6-137		%REC	1	10/9/2012 7:51:52 PM
Surr: Phenol-d5	98.0	20.3-132		%REC	1	10/9/2012 7:51:52 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Toluene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Ethylbenzene	0.050	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,2,4-Trimethylbenzene	0.25	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,3,5-Trimethylbenzene	0.073	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Naphthalene	0.40	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
1-Methylnaphthalene	0.55	0.20		mg/Kg	1	10/15/2012 7:49:26 PM
2-Methylnaphthalene	0.93	0.20		mg/Kg	1	10/15/2012 7:49:26 PM
Acetone	ND	0.75		mg/Kg	1	10/15/2012 7:49:26 PM
Bromobenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Bromoform	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Bromomethane	ND	0.15		mg/Kg	1	10/15/2012 7:49:26 PM
2-Butanone	ND	0.50		mg/Kg	1	10/15/2012 7:49:26 PM
Carbon disulfide	ND	0.50		mg/Kg	1	10/15/2012 7:49:26 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
Chlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Chloroethane	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (17-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:45:00 PM
Lab ID: 1210332-002
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Chloroform	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Chloromethane	ND	0.15		mg/Kg	1	10/15/2012 7:49:26 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Dibromomethane	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
2-Hexanone	ND	0.50		mg/Kg	1	10/15/2012 7:49:26 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/15/2012 7:49:26 PM
Methylene chloride	ND	0.15		mg/Kg	1	10/15/2012 7:49:26 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/15/2012 7:49:26 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Styrene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/15/2012 7:49:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (17-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:45:00 PM
Lab ID: 1210332-002
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Vinyl chloride	ND	0.050		mg/Kg	1	10/15/2012 7:49:26 PM
Xylenes, Total	0.35	0.10		mg/Kg	1	10/15/2012 7:49:26 PM
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%REC	1	10/15/2012 7:49:26 PM
Surr: 4-Bromofluorobenzene	89.7	70-130		%REC	1	10/15/2012 7:49:26 PM
Surr: Dibromofluoromethane	91.8	70-130		%REC	1	10/15/2012 7:49:26 PM
Surr: Toluene-d8	98.6	70-130		%REC	1	10/15/2012 7:49:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (23-24')
Project: SWMU NO.1
Collection Date: 10/3/2012 2:00:00 PM
Lab ID: 1210332-003
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/6/2012 10:08:49 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/6/2012 10:08:49 PM
Surr: DNOP	89.2	77.6-140		%REC	1	10/6/2012 10:08:49 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 6:25:18 AM
Surr: BFB	85.7	84-116		%REC	1	10/6/2012 6:25:18 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:11:55 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 10:16:19 AM
Arsenic	ND	12		mg/Kg	5	10/11/2012 10:16:19 AM
Barium	200	0.50		mg/Kg	5	10/11/2012 10:16:19 AM
Beryllium	1.1	0.75		mg/Kg	5	10/11/2012 10:16:19 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 10:16:19 AM
Chromium	14	1.5		mg/Kg	5	10/11/2012 10:16:19 AM
Cobalt	5.9	1.5		mg/Kg	5	10/11/2012 10:16:19 AM
Iron	18000	500		mg/Kg	500	10/11/2012 12:08:30 PM
Lead	2.1	1.2		mg/Kg	5	10/11/2012 10:16:19 AM
Manganese	340	1.0		mg/Kg	10	10/11/2012 12:06:07 PM
Nickel	12	2.5		mg/Kg	5	10/11/2012 10:16:19 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 10:16:19 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 10:16:19 AM
Vanadium	15	12		mg/Kg	5	10/11/2012 10:16:19 AM
Zinc	26	12		mg/Kg	5	10/11/2012 10:16:19 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (23-24')
Project: SWMU NO.1
Collection Date: 10/3/2012 2:00:00 PM
Lab ID: 1210332-003
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 8:21:38 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 8:21:38 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 8:21:38 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 8:21:38 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 8:21:38 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 8:21:38 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (23-24')
Project: SWMU NO.1
Collection Date: 10/3/2012 2:00:00 PM
Lab ID: 1210332-003
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 8:21:38 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 8:21:38 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 8:21:38 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 8:21:38 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 8:21:38 PM
Surr: 2,4,6-Tribromophenol	90.5	21.3-145		%REC	1	10/9/2012 8:21:38 PM
Surr: 2-Fluorobiphenyl	80.2	20-131		%REC	1	10/9/2012 8:21:38 PM
Surr: 2-Fluorophenol	88.2	11.9-130		%REC	1	10/9/2012 8:21:38 PM
Surr: 4-Terphenyl-d14	81.6	25.1-149		%REC	1	10/9/2012 8:21:38 PM
Surr: Nitrobenzene-d5	79.5	25.6-137		%REC	1	10/9/2012 8:21:38 PM
Surr: Phenol-d5	86.5	20.3-132		%REC	1	10/9/2012 8:21:38 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00566	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Toluene	0.00275	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Ethylbenzene	0.00125	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Xylenes, Total	0.00218	0.00183		mg/Kg	1	10/8/2012 10:27:25 PM
Methyl tert-butyl ether (MTBE)	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,2,4-Trimethylbenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,3,5-Trimethylbenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,2-Dichloroethane (EDC)	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,2-Dibromoethane (EDB)	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Naphthalene	ND	0.00183		mg/Kg	1	10/8/2012 10:27:25 PM
1-Methylnaphthalene	ND	0.00366		mg/Kg	1	10/8/2012 10:27:25 PM
2-Methylnaphthalene	ND	0.00366		mg/Kg	1	10/8/2012 10:27:25 PM
Acetone	0.0173	0.00915		mg/Kg	1	10/8/2012 10:27:25 PM
Bromobenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Bromodichloromethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Bromoform	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Bromomethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
2-Butanone	ND	0.00915		mg/Kg	1	10/8/2012 10:27:25 PM
Carbon tetrachloride	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Chlorobenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Chloroethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (23-24')
Project: SWMU NO.1
Collection Date: 10/3/2012 2:00:00 PM
Lab ID: 1210332-003
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Chloromethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
2-Chlorotoluene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Carbon disulfide	ND	0.00915		mg/Kg	1	10/8/2012 10:27:25 PM
4-Chlorotoluene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
cis-1,2-DCE	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
cis-1,3-Dichloropropene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,2-Dibromo-3-chloropropane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Dibromochloromethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Dibromomethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,2-Dichlorobenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,3-Dichlorobenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,4-Dichlorobenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Dichlorodifluoromethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,1-Dichloroethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,1-Dichloroethene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,2-Dichloropropane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,3-Dichloropropane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
2,2-Dichloropropane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,1-Dichloropropene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Hexachlorobutadiene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Isopropylbenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
4-Isopropyltoluene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Methylene chloride	ND	0.00275		mg/Kg	1	10/8/2012 10:27:25 PM
n-Butylbenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
2-Hexanone	ND	0.00915		mg/Kg	1	10/8/2012 10:27:25 PM
n-Propylbenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
sec-Butylbenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Styrene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
4-Methyl-2-pentanone	ND	0.00915		mg/Kg	1	10/8/2012 10:27:25 PM
tert-Butylbenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,1,1,2-Tetrachloroethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,1,2,2-Tetrachloroethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Tetrachloroethene (PCE)	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
trans-1,2-DCE	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
trans-1,3-Dichloropropene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,2,3-Trichlorobenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,2,4-Trichlorobenzene	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,1,1-Trichloroethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
1,1,2-Trichloroethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Trichloroethene (TCE)	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Trichlorofluoromethane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (23-24')
Project: SWMU NO.1
Collection Date: 10/3/2012 2:00:00 PM
Lab ID: 1210332-003
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Vinyl chloride	ND	0.000915		mg/Kg	1	10/8/2012 10:27:25 PM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	10/8/2012 10:27:25 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/8/2012 10:27:25 PM
Surr: Dibromofluoromethane	92.2	70-130		%REC	1	10/8/2012 10:27:25 PM
Surr: Toluene-d8	95.4	70-130		%REC	1	10/8/2012 10:27:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210332-004
Matrix: TRIP BLANK
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Toluene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Ethylbenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Naphthalene	ND	2.0		µg/L	1	10/5/2012 7:34:04 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/5/2012 7:34:04 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/5/2012 7:34:04 PM
Acetone	ND	10		µg/L	1	10/5/2012 7:34:04 PM
Bromobenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Bromoform	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Bromomethane	ND	3.0		µg/L	1	10/5/2012 7:34:04 PM
2-Butanone	ND	10		µg/L	1	10/5/2012 7:34:04 PM
Carbon disulfide	ND	10		µg/L	1	10/5/2012 7:34:04 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Chlorobenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Chloroethane	ND	2.0		µg/L	1	10/5/2012 7:34:04 PM
Chloroform	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Chloromethane	ND	3.0		µg/L	1	10/5/2012 7:34:04 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/5/2012 7:34:04 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Dibromomethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/5/2012 7:34:04 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
2-Hexanone	ND	10		µg/L	1	10/5/2012 7:34:04 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210332-004
Matrix: TRIP BLANK
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Isopropylbenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/5/2012 7:34:04 PM
Methylene Chloride	ND	3.0		µg/L	1	10/5/2012 7:34:04 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/5/2012 7:34:04 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Styrene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/5/2012 7:34:04 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/5/2012 7:34:04 PM
Vinyl chloride	ND	1.0		µg/L	1	10/5/2012 7:34:04 PM
Xylenes, Total	ND	1.5		µg/L	1	10/5/2012 7:34:04 PM
Surr: 1,2-Dichloroethane-d4	83.8	70-130		%REC	1	10/5/2012 7:34:04 PM
Surr: 4-Bromofluorobenzene	82.2	70-130		%REC	1	10/5/2012 7:34:04 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/5/2012 7:34:04 PM
Surr: Toluene-d8	78.4	70-130		%REC	1	10/5/2012 7:34:04 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 GW
Project: SWMU NO.1
Collection Date: 10/3/2012 9:30:00 AM
Lab ID: 1210332-005
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/8/2012 12:52:54 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 12:52:54 PM
Surr: DNOP	119	79.5-166		%REC	1	10/8/2012 12:52:54 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.65	0.10		mg/L	2	10/6/2012 4:08:36 PM
Surr: BFB	114	69.8-119		%REC	2	10/6/2012 4:08:36 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	0.89	0.10		mg/L	1	10/5/2012 8:47:29 PM
Chloride	1600	50		mg/L	100	10/11/2012 7:33:27 PM
Sulfate	810	10		mg/L	20	10/5/2012 8:59:53 PM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	0.54	0.0020		mg/L	1	10/16/2012 7:38:43 AM
Beryllium	0.0066	0.0020	*	mg/L	1	10/16/2012 7:38:43 AM
Cadmium	ND	0.0020		mg/L	1	10/16/2012 7:38:43 AM
Chromium	0.015	0.0060		mg/L	1	10/16/2012 7:38:43 AM
Cobalt	0.043	0.0060		mg/L	1	10/16/2012 7:38:43 AM
Iron	20	1.0	*	mg/L	50	10/16/2012 8:03:15 AM
Manganese	2.1	0.010	*	mg/L	5	10/16/2012 7:42:12 AM
Nickel	0.35	0.010	*	mg/L	1	10/16/2012 7:38:43 AM
Silver	ND	0.0050		mg/L	1	10/16/2012 7:38:43 AM
Vanadium	ND	0.050		mg/L	1	10/16/2012 7:38:43 AM
Zinc	0.068	0.010		mg/L	1	10/16/2012 7:38:43 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0025		mg/L	2.5	10/15/2012 5:58:10 PM
Arsenic	0.015	0.0025	*	mg/L	2.5	10/15/2012 5:58:10 PM
Lead	0.057	0.0025	*	mg/L	2.5	10/15/2012 5:58:10 PM
Selenium	0.0097	0.0025		mg/L	2.5	10/15/2012 5:58:10 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	10/12/2012 4:34:37 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Acenaphthylene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Aniline	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Anthracene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Azobenzene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Benz(a)anthracene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/5/2012 2:40:11 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 GW
Project: SWMU NO.1
Collection Date: 10/3/2012 9:30:00 AM
Lab ID: 1210332-005
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Benzoic acid	ND	20		µg/L	1	10/5/2012 2:40:11 PM
Benzyl alcohol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/5/2012 2:40:11 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Carbazole	ND	10		µg/L	1	10/5/2012 2:40:11 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
4-Chloroaniline	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2-Chlorophenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Chrysene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Dibenzofuran	ND	10		µg/L	1	10/5/2012 2:40:11 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Diethyl phthalate	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Dimethyl phthalate	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/5/2012 2:40:11 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/5/2012 2:40:11 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/5/2012 2:40:11 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Fluoranthene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Fluorene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Hexachlorobenzene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Hexachloroethane	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Isophorone	ND	10		µg/L	1	10/5/2012 2:40:11 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/5/2012 2:40:11 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 GW
Project: SWMU NO.1
Collection Date: 10/3/2012 9:30:00 AM
Lab ID: 1210332-005
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
3+4-Methylphenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/5/2012 2:40:11 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/5/2012 2:40:11 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Naphthalene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2-Nitroaniline	ND	10		µg/L	1	10/5/2012 2:40:11 PM
3-Nitroaniline	ND	10		µg/L	1	10/5/2012 2:40:11 PM
4-Nitroaniline	ND	20		µg/L	1	10/5/2012 2:40:11 PM
Nitrobenzene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2-Nitrophenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
4-Nitrophenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Pentachlorophenol	ND	20		µg/L	1	10/5/2012 2:40:11 PM
Phenanthrene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Phenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Pyrene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Pyridine	ND	10		µg/L	1	10/5/2012 2:40:11 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/5/2012 2:40:11 PM
Surr: 2,4,6-Tribromophenol	74.9	44.2-126		%REC	1	10/5/2012 2:40:11 PM
Surr: 2-Fluorobiphenyl	83.3	37-114		%REC	1	10/5/2012 2:40:11 PM
Surr: 2-Fluorophenol	51.8	23.4-98		%REC	1	10/5/2012 2:40:11 PM
Surr: 4-Terphenyl-d14	81.8	41.3-116		%REC	1	10/5/2012 2:40:11 PM
Surr: Nitrobenzene-d5	77.3	39.5-118		%REC	1	10/5/2012 2:40:11 PM
Surr: Phenol-d5	49.8	20.9-95.9		%REC	1	10/5/2012 2:40:11 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	3.4	1.0		µg/L	1	10/5/2012 8:01:37 PM
Toluene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Ethylbenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Methyl tert-butyl ether (MTBE)	40	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Naphthalene	ND	2.0		µg/L	1	10/5/2012 8:01:37 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/5/2012 8:01:37 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/5/2012 8:01:37 PM
Acetone	14	10		µg/L	1	10/5/2012 8:01:37 PM
Bromobenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 GW
Project: SWMU NO.1
Collection Date: 10/3/2012 9:30:00 AM
Lab ID: 1210332-005
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Bromoform	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Bromomethane	ND	3.0		µg/L	1	10/5/2012 8:01:37 PM
2-Butanone	ND	10		µg/L	1	10/5/2012 8:01:37 PM
Carbon disulfide	ND	10		µg/L	1	10/5/2012 8:01:37 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Chlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Chloroethane	ND	2.0		µg/L	1	10/5/2012 8:01:37 PM
Chloroform	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Chloromethane	ND	3.0		µg/L	1	10/5/2012 8:01:37 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/5/2012 8:01:37 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Dibromomethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/5/2012 8:01:37 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
2-Hexanone	ND	10		µg/L	1	10/5/2012 8:01:37 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/5/2012 8:01:37 PM
Methylene Chloride	ND	3.0		µg/L	1	10/5/2012 8:01:37 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/5/2012 8:01:37 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Styrene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/5/2012 8:01:37 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-3 GW
Project: SWMU NO.1
Collection Date: 10/3/2012 9:30:00 AM
Lab ID: 1210332-005
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/5/2012 8:01:37 PM
Vinyl chloride	ND	1.0		µg/L	1	10/5/2012 8:01:37 PM
Xylenes, Total	ND	1.5		µg/L	1	10/5/2012 8:01:37 PM
Surr: 1,2-Dichloroethane-d4	88.1	70-130		%REC	1	10/5/2012 8:01:37 PM
Surr: 4-Bromofluorobenzene	82.1	70-130		%REC	1	10/5/2012 8:01:37 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/5/2012 8:01:37 PM
Surr: Toluene-d8	104	70-130		%REC	1	10/5/2012 8:01:37 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (8-10')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:00:00 PM
Lab ID: 1210332-006
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/8/2012 9:05:40 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/8/2012 9:05:40 AM
Surr: DNOP	90.4	77.6-140		%REC	1	10/8/2012 9:05:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 6:55:17 AM
Surr: BFB	89.3	84-116		%REC	1	10/6/2012 6:55:17 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:13:42 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 10:21:28 AM
Arsenic	ND	12		mg/Kg	5	10/11/2012 10:21:28 AM
Barium	590	5.0		mg/Kg	50	10/11/2012 12:11:09 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 10:21:28 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 10:21:28 AM
Chromium	7.9	1.5		mg/Kg	5	10/11/2012 10:21:28 AM
Cobalt	4.0	1.5		mg/Kg	5	10/11/2012 10:21:28 AM
Iron	11000	500		mg/Kg	500	10/11/2012 12:13:37 PM
Lead	4.2	1.2		mg/Kg	5	10/11/2012 10:21:28 AM
Manganese	720	5.0		mg/Kg	50	10/11/2012 12:11:09 PM
Nickel	6.3	2.5		mg/Kg	5	10/11/2012 10:21:28 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 10:21:28 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 10:21:28 AM
Vanadium	16	12		mg/Kg	5	10/11/2012 10:21:28 AM
Zinc	16	12		mg/Kg	5	10/11/2012 10:21:28 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (8-10')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:00:00 PM
Lab ID: 1210332-006
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 8:51:23 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 8:51:23 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 8:51:23 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 8:51:23 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 8:51:23 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 8:51:23 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (8-10')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:00:00 PM
Lab ID: 1210332-006
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 8:51:23 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 8:51:23 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 8:51:23 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 8:51:23 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 8:51:23 PM
Surr: 2,4,6-Tribromophenol	96.9	21.3-145		%REC	1	10/9/2012 8:51:23 PM
Surr: 2-Fluorobiphenyl	92.7	20-131		%REC	1	10/9/2012 8:51:23 PM
Surr: 2-Fluorophenol	84.5	11.9-130		%REC	1	10/9/2012 8:51:23 PM
Surr: 4-Terphenyl-d14	80.8	25.1-149		%REC	1	10/9/2012 8:51:23 PM
Surr: Nitrobenzene-d5	87.8	25.6-137		%REC	1	10/9/2012 8:51:23 PM
Surr: Phenol-d5	84.9	20.3-132		%REC	1	10/9/2012 8:51:23 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Toluene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Ethylbenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Xylenes, Total	ND	0.00181		mg/Kg	1	10/8/2012 10:58:13 PM
Methyl tert-butyl ether (MTBE)	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,2,4-Trimethylbenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,3,5-Trimethylbenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,2-Dichloroethane (EDC)	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,2-Dibromoethane (EDB)	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Naphthalene	ND	0.00181		mg/Kg	1	10/8/2012 10:58:13 PM
1-Methylnaphthalene	ND	0.00363		mg/Kg	1	10/8/2012 10:58:13 PM
2-Methylnaphthalene	ND	0.00363		mg/Kg	1	10/8/2012 10:58:13 PM
Acetone	0.0314	0.00907		mg/Kg	1	10/8/2012 10:58:13 PM
Bromobenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Bromodichloromethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Bromoform	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Bromomethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
2-Butanone	ND	0.00907		mg/Kg	1	10/8/2012 10:58:13 PM
Carbon tetrachloride	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Chlorobenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Chloroethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (8-10')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:00:00 PM
Lab ID: 1210332-006
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Chloromethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
2-Chlorotoluene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Carbon disulfide	ND	0.00907		mg/Kg	1	10/8/2012 10:58:13 PM
4-Chlorotoluene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
cis-1,2-DCE	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
cis-1,3-Dichloropropene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,2-Dibromo-3-chloropropane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Dibromochloromethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Dibromomethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,2-Dichlorobenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,3-Dichlorobenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,4-Dichlorobenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Dichlorodifluoromethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,1-Dichloroethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,1-Dichloroethene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,2-Dichloropropane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,3-Dichloropropane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
2,2-Dichloropropane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,1-Dichloropropene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Hexachlorobutadiene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Isopropylbenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
4-Isopropyltoluene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Methylene chloride	ND	0.00272		mg/Kg	1	10/8/2012 10:58:13 PM
n-Butylbenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
2-Hexanone	ND	0.00907		mg/Kg	1	10/8/2012 10:58:13 PM
n-Propylbenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
sec-Butylbenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Styrene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
4-Methyl-2-pentanone	ND	0.00907		mg/Kg	1	10/8/2012 10:58:13 PM
tert-Butylbenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,1,1,2-Tetrachloroethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,1,2,2-Tetrachloroethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Tetrachloroethene (PCE)	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
trans-1,2-DCE	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
trans-1,3-Dichloropropene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,2,3-Trichlorobenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,2,4-Trichlorobenzene	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,1,1-Trichloroethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
1,1,2-Trichloroethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Trichloroethene (TCE)	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Trichlorofluoromethane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (8-10')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:00:00 PM
Lab ID: 1210332-006
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Vinyl chloride	ND	0.000907		mg/Kg	1	10/8/2012 10:58:13 PM
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	10/8/2012 10:58:13 PM
Surr: 4-Bromofluorobenzene	91.4	70-130		%REC	1	10/8/2012 10:58:13 PM
Surr: Dibromofluoromethane	93.1	70-130		%REC	1	10/8/2012 10:58:13 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/8/2012 10:58:13 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-007
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	16		mg/Kg	1	10/8/2012 9:56:53 AM
Motor Oil Range Organics (MRO)	ND	82		mg/Kg	1	10/8/2012 9:56:53 AM
Surr: DNOP	91.8	77.6-140		%REC	1	10/8/2012 9:56:53 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 7:25:26 AM
Surr: BFB	96.1	84-116		%REC	1	10/6/2012 7:25:26 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:15:28 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 10:26:23 AM
Arsenic	ND	12		mg/Kg	5	10/11/2012 10:26:23 AM
Barium	360	5.0		mg/Kg	50	10/11/2012 12:16:30 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 10:26:23 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 10:26:23 AM
Chromium	3.7	1.5		mg/Kg	5	10/11/2012 10:26:23 AM
Cobalt	2.0	1.5		mg/Kg	5	10/11/2012 10:26:23 AM
Iron	5300	500		mg/Kg	500	10/11/2012 12:18:56 PM
Lead	3.1	1.2		mg/Kg	5	10/11/2012 10:26:23 AM
Manganese	550	5.0		mg/Kg	50	10/11/2012 12:16:30 PM
Nickel	2.9	2.5		mg/Kg	5	10/11/2012 10:26:23 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 10:26:23 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 10:26:23 AM
Vanadium	ND	12		mg/Kg	5	10/11/2012 10:26:23 AM
Zinc	ND	12		mg/Kg	5	10/11/2012 10:26:23 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Aniline	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Anthracene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Azobenzene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-007
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Carbazole	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/9/2012 9:20:56 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Chrysene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 9:20:56 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/9/2012 9:20:56 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/9/2012 9:20:56 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/9/2012 9:20:56 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/9/2012 9:20:56 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Fluorene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Isophorone	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Naphthalene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-007
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/9/2012 9:20:56 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/9/2012 9:20:56 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/9/2012 9:20:56 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Phenol	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Pyrene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Pyridine	ND	1.0		mg/Kg	1	10/9/2012 9:20:56 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 9:20:56 PM
Surr: 2,4,6-Tribromophenol	97.4	21.3-145		%REC	1	10/9/2012 9:20:56 PM
Surr: 2-Fluorobiphenyl	90.6	20-131		%REC	1	10/9/2012 9:20:56 PM
Surr: 2-Fluorophenol	104	11.9-130		%REC	1	10/9/2012 9:20:56 PM
Surr: 4-Terphenyl-d14	79.0	25.1-149		%REC	1	10/9/2012 9:20:56 PM
Surr: Nitrobenzene-d5	92.0	25.6-137		%REC	1	10/9/2012 9:20:56 PM
Surr: Phenol-d5	95.8	20.3-132		%REC	1	10/9/2012 9:20:56 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Toluene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Ethylbenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Xylenes, Total	ND	0.00227		mg/Kg	1	10/8/2012 11:29:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,2,4-Trimethylbenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,3,5-Trimethylbenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,2-Dichloroethane (EDC)	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,2-Dibromoethane (EDB)	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Naphthalene	ND	0.00227		mg/Kg	1	10/8/2012 11:29:01 PM
1-Methylnaphthalene	ND	0.00453		mg/Kg	1	10/8/2012 11:29:01 PM
2-Methylnaphthalene	ND	0.00453		mg/Kg	1	10/8/2012 11:29:01 PM
Acetone	0.0153	0.0113		mg/Kg	1	10/8/2012 11:29:01 PM
Bromobenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Bromodichloromethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Bromoform	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Bromomethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
2-Butanone	ND	0.0113		mg/Kg	1	10/8/2012 11:29:01 PM
Carbon tetrachloride	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Chlorobenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Chloroethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-007
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Chloromethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
2-Chlorotoluene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Carbon disulfide	ND	0.0113		mg/Kg	1	10/8/2012 11:29:01 PM
4-Chlorotoluene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
cis-1,2-DCE	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
cis-1,3-Dichloropropene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,2-Dibromo-3-chloropropane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Dibromochloromethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Dibromomethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,2-Dichlorobenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,3-Dichlorobenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,4-Dichlorobenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Dichlorodifluoromethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,1-Dichloroethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,1-Dichloroethene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,2-Dichloropropane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,3-Dichloropropane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
2,2-Dichloropropane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,1-Dichloropropene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Hexachlorobutadiene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Isopropylbenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
4-Isopropyltoluene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Methylene chloride	ND	0.00340		mg/Kg	1	10/8/2012 11:29:01 PM
n-Butylbenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
2-Hexanone	ND	0.0113		mg/Kg	1	10/8/2012 11:29:01 PM
n-Propylbenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
sec-Butylbenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Styrene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
4-Methyl-2-pentanone	ND	0.0113		mg/Kg	1	10/8/2012 11:29:01 PM
tert-Butylbenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,1,1,2-Tetrachloroethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,1,2,2-Tetrachloroethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Tetrachloroethene (PCE)	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
trans-1,2-DCE	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
trans-1,3-Dichloropropene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,2,3-Trichlorobenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,2,4-Trichlorobenzene	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,1,1-Trichloroethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
1,1,2-Trichloroethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Trichloroethene (TCE)	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Trichlorofluoromethane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 1:15:00 PM
Lab ID: 1210332-007
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Vinyl chloride	ND	0.00113		mg/Kg	1	10/8/2012 11:29:01 PM
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	10/8/2012 11:29:01 PM
Surr: 4-Bromofluorobenzene	87.2	70-130		%REC	1	10/8/2012 11:29:01 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/8/2012 11:29:01 PM
Surr: Toluene-d8	103	70-130		%REC	1	10/8/2012 11:29:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (26-27')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:20:00 PM
Lab ID: 1210332-008
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	12		mg/Kg	1	10/6/2012 10:33:54 PM
Motor Oil Range Organics (MRO)	ND	59		mg/Kg	1	10/6/2012 10:33:54 PM
Surr: DNOP	88.2	77.6-140		%REC	1	10/6/2012 10:33:54 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/8/2012 6:56:09 PM
Surr: BFB	113	84-116		%REC	1	10/8/2012 6:56:09 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:17:13 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	2.5		mg/Kg	1	10/11/2012 10:28:52 AM
Arsenic	ND	2.5		mg/Kg	1	10/11/2012 10:28:52 AM
Barium	230	0.50		mg/Kg	5	10/11/2012 10:31:19 AM
Beryllium	0.30	0.15		mg/Kg	1	10/11/2012 10:28:52 AM
Cadmium	ND	0.10		mg/Kg	1	10/11/2012 10:28:52 AM
Chromium	5.1	0.30		mg/Kg	1	10/11/2012 10:28:52 AM
Cobalt	2.1	0.30		mg/Kg	1	10/11/2012 10:28:52 AM
Iron	5900	500		mg/Kg	500	10/11/2012 12:21:48 PM
Lead	0.57	0.25		mg/Kg	1	10/11/2012 10:28:52 AM
Manganese	200	0.50		mg/Kg	5	10/11/2012 10:31:19 AM
Nickel	3.5	0.50		mg/Kg	1	10/11/2012 10:28:52 AM
Selenium	ND	2.5		mg/Kg	1	10/11/2012 10:28:52 AM
Silver	ND	0.25		mg/Kg	1	10/11/2012 10:28:52 AM
Vanadium	8.6	2.5		mg/Kg	1	10/11/2012 10:28:52 AM
Zinc	8.5	2.5		mg/Kg	1	10/11/2012 10:28:52 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Acenaphthylene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Aniline	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Anthracene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Azobenzene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Benz(a)anthracene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Benzo(a)pyrene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Benzo(b)fluoranthene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Benzo(g,h,i)perylene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Benzo(k)fluoranthene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Benzoic acid	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
Benzyl alcohol	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Bis(2-chloroethoxy)methane	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Bis(2-chloroethyl)ether	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Bis(2-chloroisopropyl)ether	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (26-27')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:20:00 PM
Lab ID: 1210332-008
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
4-Bromophenyl phenyl ether	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Butyl benzyl phthalate	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Carbazole	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
2-Chloronaphthalene	ND	0.49		mg/Kg	1	10/9/2012 9:50:28 PM
2-Chlorophenol	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
4-Chlorophenyl phenyl ether	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Chrysene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
Di-n-octyl phthalate	ND	0.49		mg/Kg	1	10/9/2012 9:50:28 PM
Dibenz(a,h)anthracene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Dibenzofuran	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
1,2-Dichlorobenzene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
1,3-Dichlorobenzene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
1,4-Dichlorobenzene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
3,3´-Dichlorobenzidine	ND	0.49		mg/Kg	1	10/9/2012 9:50:28 PM
Diethyl phthalate	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Dimethyl phthalate	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/9/2012 9:50:28 PM
2,4-Dimethylphenol	ND	0.59		mg/Kg	1	10/9/2012 9:50:28 PM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/9/2012 9:50:28 PM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
Fluoranthene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Fluorene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Hexachlorobenzene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Hexachlorobutadiene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Hexachlorocyclopentadiene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Hexachloroethane	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Indeno(1,2,3-cd)pyrene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Isophorone	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
1-Methylnaphthalene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
2-Methylnaphthalene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
2-Methylphenol	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
3+4-Methylphenol	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
N-Nitrosodi-n-propylamine	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
N-Nitrosodiphenylamine	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Naphthalene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
2-Nitroaniline	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (26-27')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:20:00 PM
Lab ID: 1210332-008
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/9/2012 9:50:28 PM
Nitrobenzene	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
2-Nitrophenol	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
4-Nitrophenol	ND	0.49		mg/Kg	1	10/9/2012 9:50:28 PM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/9/2012 9:50:28 PM
Phenanthrene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Phenol	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Pyrene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Pyridine	ND	0.99		mg/Kg	1	10/9/2012 9:50:28 PM
1,2,4-Trichlorobenzene	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
2,4,5-Trichlorophenol	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
2,4,6-Trichlorophenol	ND	0.39		mg/Kg	1	10/9/2012 9:50:28 PM
Surr: 2,4,6-Tribromophenol	70.4	21.3-145		%REC	1	10/9/2012 9:50:28 PM
Surr: 2-Fluorobiphenyl	65.2	20-131		%REC	1	10/9/2012 9:50:28 PM
Surr: 2-Fluorophenol	65.4	11.9-130		%REC	1	10/9/2012 9:50:28 PM
Surr: 4-Terphenyl-d14	61.6	25.1-149		%REC	1	10/9/2012 9:50:28 PM
Surr: Nitrobenzene-d5	64.1	25.6-137		%REC	1	10/9/2012 9:50:28 PM
Surr: Phenol-d5	66.6	20.3-132		%REC	1	10/9/2012 9:50:28 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00594	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Toluene	0.00831	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Ethylbenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Xylenes, Total	ND	0.00202		mg/Kg	1	10/8/2012 11:59:48 PM
Methyl tert-butyl ether (MTBE)	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,2,4-Trimethylbenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,3,5-Trimethylbenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,2-Dichloroethane (EDC)	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,2-Dibromoethane (EDB)	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Naphthalene	ND	0.00202		mg/Kg	1	10/8/2012 11:59:48 PM
1-Methylnaphthalene	ND	0.00404		mg/Kg	1	10/8/2012 11:59:48 PM
2-Methylnaphthalene	ND	0.00404		mg/Kg	1	10/8/2012 11:59:48 PM
Acetone	0.0233	0.0101		mg/Kg	1	10/8/2012 11:59:48 PM
Bromobenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Bromodichloromethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Bromoform	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Bromomethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
2-Butanone	ND	0.0101		mg/Kg	1	10/8/2012 11:59:48 PM
Carbon tetrachloride	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Chlorobenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Chloroethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (26-27')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:20:00 PM
Lab ID: 1210332-008
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Chloromethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
2-Chlorotoluene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Carbon disulfide	ND	0.0101		mg/Kg	1	10/8/2012 11:59:48 PM
4-Chlorotoluene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
cis-1,2-DCE	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,2-Dibromo-3-chloropropane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Dibromochloromethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Dibromomethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,2-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,3-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,4-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Dichlorodifluoromethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,1-Dichloroethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,1-Dichloroethene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,3-Dichloropropane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
2,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,1-Dichloropropene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Hexachlorobutadiene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Isopropylbenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
4-Isopropyltoluene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Methylene chloride	ND	0.00303		mg/Kg	1	10/8/2012 11:59:48 PM
n-Butylbenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
2-Hexanone	ND	0.0101		mg/Kg	1	10/8/2012 11:59:48 PM
n-Propylbenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
sec-Butylbenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Styrene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
4-Methyl-2-pentanone	ND	0.0101		mg/Kg	1	10/8/2012 11:59:48 PM
tert-Butylbenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,1,1,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Tetrachloroethene (PCE)	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
trans-1,2-DCE	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,2,3-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,2,4-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,1,1-Trichloroethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
1,1,2-Trichloroethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Trichloroethene (TCE)	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Trichlorofluoromethane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (26-27')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:20:00 PM
Lab ID: 1210332-008
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Vinyl chloride	ND	0.00101		mg/Kg	1	10/8/2012 11:59:48 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	10/8/2012 11:59:48 PM
Surr: 4-Bromofluorobenzene	87.5	70-130		%REC	1	10/8/2012 11:59:48 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/8/2012 11:59:48 PM
Surr: Toluene-d8	95.7	70-130		%REC	1	10/8/2012 11:59:48 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (27-28')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:30:00 PM
Lab ID: 1210332-009
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/6/2012 10:58:59 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/6/2012 10:58:59 PM
Surr: DNOP	89.3	77.6-140		%REC	1	10/6/2012 10:58:59 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 7:40:09 PM
Surr: BFB	98.1	84-116		%REC	1	10/6/2012 7:40:09 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:19:00 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 2:31:31 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 2:31:31 PM
Barium	380	5.0		mg/Kg	50	10/11/2012 12:24:38 PM
Beryllium	1.1	0.75		mg/Kg	5	10/11/2012 10:45:59 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 10:45:59 AM
Chromium	15	1.5		mg/Kg	5	10/11/2012 10:45:59 AM
Cobalt	7.8	1.5		mg/Kg	5	10/11/2012 10:45:59 AM
Iron	17000	500		mg/Kg	500	10/11/2012 12:27:03 PM
Lead	ND	1.2		mg/Kg	5	10/11/2012 10:45:59 AM
Manganese	640	5.0		mg/Kg	50	10/11/2012 12:24:38 PM
Nickel	12	2.5		mg/Kg	5	10/11/2012 10:45:59 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 10:45:59 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 10:45:59 AM
Vanadium	22	12		mg/Kg	5	10/11/2012 10:45:59 AM
Zinc	31	12		mg/Kg	5	10/11/2012 10:45:59 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (27-28')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:30:00 PM
Lab ID: 1210332-009
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 10:19:57 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 10:19:57 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 10:19:57 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 10:19:57 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 10:19:57 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 10:19:57 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (27-28')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:30:00 PM
Lab ID: 1210332-009
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 10:19:57 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 10:19:57 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 10:19:57 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 10:19:57 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 10:19:57 PM
Surr: 2,4,6-Tribromophenol	84.9	21.3-145		%REC	1	10/9/2012 10:19:57 PM
Surr: 2-Fluorobiphenyl	77.2	20-131		%REC	1	10/9/2012 10:19:57 PM
Surr: 2-Fluorophenol	79.7	11.9-130		%REC	1	10/9/2012 10:19:57 PM
Surr: 4-Terphenyl-d14	76.5	25.1-149		%REC	1	10/9/2012 10:19:57 PM
Surr: Nitrobenzene-d5	87.1	25.6-137		%REC	1	10/9/2012 10:19:57 PM
Surr: Phenol-d5	79.7	20.3-132		%REC	1	10/9/2012 10:19:57 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00158	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Toluene	0.00101	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Ethylbenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Xylenes, Total	ND	0.00199		mg/Kg	1	10/9/2012 12:30:33 AM
Methyl tert-butyl ether (MTBE)	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,2,4-Trimethylbenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,3,5-Trimethylbenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,2-Dichloroethane (EDC)	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,2-Dibromoethane (EDB)	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Naphthalene	ND	0.00199		mg/Kg	1	10/9/2012 12:30:33 AM
1-Methylnaphthalene	ND	0.00398		mg/Kg	1	10/9/2012 12:30:33 AM
2-Methylnaphthalene	ND	0.00398		mg/Kg	1	10/9/2012 12:30:33 AM
Acetone	ND	0.00995		mg/Kg	1	10/9/2012 12:30:33 AM
Bromobenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Bromodichloromethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Bromoform	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Bromomethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
2-Butanone	ND	0.00995		mg/Kg	1	10/9/2012 12:30:33 AM
Carbon tetrachloride	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Chlorobenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Chloroethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (27-28')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:30:00 PM
Lab ID: 1210332-009
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Chloromethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
2-Chlorotoluene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Carbon disulfide	ND	0.00995		mg/Kg	1	10/9/2012 12:30:33 AM
4-Chlorotoluene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
cis-1,2-DCE	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
cis-1,3-Dichloropropene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,2-Dibromo-3-chloropropane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Dibromochloromethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Dibromomethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,2-Dichlorobenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,3-Dichlorobenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,4-Dichlorobenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Dichlorodifluoromethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,1-Dichloroethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,1-Dichloroethene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,2-Dichloropropane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,3-Dichloropropane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
2,2-Dichloropropane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,1-Dichloropropene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Hexachlorobutadiene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Isopropylbenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
4-Isopropyltoluene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Methylene chloride	ND	0.00299		mg/Kg	1	10/9/2012 12:30:33 AM
n-Butylbenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
2-Hexanone	ND	0.00995		mg/Kg	1	10/9/2012 12:30:33 AM
n-Propylbenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
sec-Butylbenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Styrene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
4-Methyl-2-pentanone	ND	0.00995		mg/Kg	1	10/9/2012 12:30:33 AM
tert-Butylbenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,1,1,2-Tetrachloroethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,1,2,2-Tetrachloroethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Tetrachloroethene (PCE)	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
trans-1,2-DCE	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
trans-1,3-Dichloropropene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,2,3-Trichlorobenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,2,4-Trichlorobenzene	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,1,1-Trichloroethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
1,1,2-Trichloroethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Trichloroethene (TCE)	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Trichlorofluoromethane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (27-28')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:30:00 PM
Lab ID: 1210332-009
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Vinyl chloride	ND	0.000995		mg/Kg	1	10/9/2012 12:30:33 AM
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%REC	1	10/9/2012 12:30:33 AM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1	10/9/2012 12:30:33 AM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/9/2012 12:30:33 AM
Surr: Toluene-d8	97.1	70-130		%REC	1	10/9/2012 12:30:33 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100312
Project: SWMU NO.1
Collection Date: 10/3/2012 6:44:00 PM
Lab ID: 1210332-010
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/8/2012 1:14:39 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 1:14:39 PM
Surr: DNOP	118	79.5-166		%REC	1	10/8/2012 1:14:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/5/2012 11:51:04 PM
Surr: BFB	113	69.8-119		%REC	1	10/5/2012 11:51:04 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	ND	0.10		mg/L	1	10/5/2012 9:12:18 PM
Chloride	ND	0.50		mg/L	1	10/5/2012 9:12:18 PM
Sulfate	ND	0.50		mg/L	1	10/5/2012 9:12:18 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	10/10/2012 8:08:55 PM
Beryllium	ND	0.0020		mg/L	1	10/10/2012 8:08:55 PM
Cadmium	ND	0.0020		mg/L	1	10/10/2012 8:08:55 PM
Chromium	ND	0.0060		mg/L	1	10/12/2012 7:42:29 AM
Cobalt	ND	0.0060		mg/L	1	10/10/2012 8:08:55 PM
Iron	0.025	0.020		mg/L	1	10/10/2012 8:08:55 PM
Manganese	ND	0.0020		mg/L	1	10/10/2012 8:08:55 PM
Nickel	ND	0.010		mg/L	1	10/10/2012 8:08:55 PM
Silver	ND	0.0050		mg/L	1	10/10/2012 8:08:55 PM
Vanadium	ND	0.050		mg/L	1	10/10/2012 8:08:55 PM
Zinc	ND	0.010		mg/L	1	10/12/2012 7:42:29 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/17/2012 11:13:21 AM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 11:13:21 AM
Lead	ND	0.0010		mg/L	1	10/17/2012 11:13:21 AM
Selenium	ND	0.0010		mg/L	1	10/17/2012 11:13:21 AM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	10/12/2012 4:36:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Acenaphthylene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Aniline	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Anthracene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Azobenzene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Benz(a)anthracene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/5/2012 3:09:51 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100312
Project: SWMU NO.1
Collection Date: 10/3/2012 6:44:00 PM
Lab ID: 1210332-010
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Benzoic acid	ND	20		µg/L	1	10/5/2012 3:09:51 PM
Benzyl alcohol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/5/2012 3:09:51 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Carbazole	ND	10		µg/L	1	10/5/2012 3:09:51 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
4-Chloroaniline	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2-Chlorophenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Chrysene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Dibenzofuran	ND	10		µg/L	1	10/5/2012 3:09:51 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Diethyl phthalate	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Dimethyl phthalate	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/5/2012 3:09:51 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/5/2012 3:09:51 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/5/2012 3:09:51 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Fluoranthene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Fluorene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Hexachlorobenzene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Hexachloroethane	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Isophorone	ND	10		µg/L	1	10/5/2012 3:09:51 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/5/2012 3:09:51 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100312
Project: SWMU NO.1
Collection Date: 10/3/2012 6:44:00 PM
Lab ID: 1210332-010
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
3+4-Methylphenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/5/2012 3:09:51 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/5/2012 3:09:51 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Naphthalene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2-Nitroaniline	ND	10		µg/L	1	10/5/2012 3:09:51 PM
3-Nitroaniline	ND	10		µg/L	1	10/5/2012 3:09:51 PM
4-Nitroaniline	ND	20		µg/L	1	10/5/2012 3:09:51 PM
Nitrobenzene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2-Nitrophenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
4-Nitrophenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Pentachlorophenol	ND	20		µg/L	1	10/5/2012 3:09:51 PM
Phenanthrene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Phenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Pyrene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Pyridine	ND	10		µg/L	1	10/5/2012 3:09:51 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/5/2012 3:09:51 PM
Surr: 2,4,6-Tribromophenol	92.9	44.2-126		%REC	1	10/5/2012 3:09:51 PM
Surr: 2-Fluorobiphenyl	89.6	37-114		%REC	1	10/5/2012 3:09:51 PM
Surr: 2-Fluorophenol	69.2	23.4-98		%REC	1	10/5/2012 3:09:51 PM
Surr: 4-Terphenyl-d14	83.7	41.3-116		%REC	1	10/5/2012 3:09:51 PM
Surr: Nitrobenzene-d5	91.5	39.5-118		%REC	1	10/5/2012 3:09:51 PM
Surr: Phenol-d5	51.7	20.9-95.9		%REC	1	10/5/2012 3:09:51 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Toluene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Ethylbenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Naphthalene	ND	2.0		µg/L	1	10/5/2012 8:29:24 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/5/2012 8:29:24 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/5/2012 8:29:24 PM
Acetone	ND	10		µg/L	1	10/5/2012 8:29:24 PM
Bromobenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100312
Project: SWMU NO.1
Collection Date: 10/3/2012 6:44:00 PM
Lab ID: 1210332-010
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Bromoform	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Bromomethane	ND	3.0		µg/L	1	10/5/2012 8:29:24 PM
2-Butanone	ND	10		µg/L	1	10/5/2012 8:29:24 PM
Carbon disulfide	ND	10		µg/L	1	10/5/2012 8:29:24 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Chlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Chloroethane	ND	2.0		µg/L	1	10/5/2012 8:29:24 PM
Chloroform	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Chloromethane	ND	3.0		µg/L	1	10/5/2012 8:29:24 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/5/2012 8:29:24 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Dibromomethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/5/2012 8:29:24 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
2-Hexanone	ND	10		µg/L	1	10/5/2012 8:29:24 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/5/2012 8:29:24 PM
Methylene Chloride	ND	3.0		µg/L	1	10/5/2012 8:29:24 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/5/2012 8:29:24 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Styrene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/5/2012 8:29:24 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100312
Project: SWMU NO.1
Collection Date: 10/3/2012 6:44:00 PM
Lab ID: 1210332-010
Matrix: AQUEOUS
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/5/2012 8:29:24 PM
Vinyl chloride	ND	1.0		µg/L	1	10/5/2012 8:29:24 PM
Xylenes, Total	ND	1.5		µg/L	1	10/5/2012 8:29:24 PM
Surr: 1,2-Dichloroethane-d4	82.3	70-130		%REC	1	10/5/2012 8:29:24 PM
Surr: 4-Bromofluorobenzene	80.0	70-130		%REC	1	10/5/2012 8:29:24 PM
Surr: Dibromofluoromethane	89.2	70-130		%REC	1	10/5/2012 8:29:24 PM
Surr: Toluene-d8	80.0	70-130		%REC	1	10/5/2012 8:29:24 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank 100312
Project: SWMU NO.1
Collection Date:
Lab ID: 1210332-011
Matrix: MEOH BLAN
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 8:10:15 PM
Surr: BFB	77.0	84-116	S	%REC	1	10/6/2012 8:10:15 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Toluene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Naphthalene	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/15/2012 8:46:00 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/15/2012 8:46:00 PM
Acetone	ND	0.75		mg/Kg	1	10/15/2012 8:46:00 PM
Bromobenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Bromoform	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Bromomethane	ND	0.15		mg/Kg	1	10/15/2012 8:46:00 PM
2-Butanone	ND	0.50		mg/Kg	1	10/15/2012 8:46:00 PM
Carbon disulfide	ND	0.50		mg/Kg	1	10/15/2012 8:46:00 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
Chlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Chloroethane	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
Chloroform	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Chloromethane	ND	0.15		mg/Kg	1	10/15/2012 8:46:00 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Dibromomethane	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank 100312
Project: SWMU NO.1
Collection Date:
Lab ID: 1210332-011
Matrix: MEOH BLAN
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
2-Hexanone	ND	0.50		mg/Kg	1	10/15/2012 8:46:00 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/15/2012 8:46:00 PM
Methylene chloride	ND	0.15		mg/Kg	1	10/15/2012 8:46:00 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/15/2012 8:46:00 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Styrene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
Vinyl chloride	ND	0.050		mg/Kg	1	10/15/2012 8:46:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/15/2012 8:46:00 PM
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	10/15/2012 8:46:00 PM
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	1	10/15/2012 8:46:00 PM
Surr: Dibromofluoromethane	94.4	70-130		%REC	1	10/15/2012 8:46:00 PM
Surr: Toluene-d8	99.2	70-130		%REC	1	10/15/2012 8:46:00 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:30:00 PM
Lab ID: 1210332-012
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/8/2012 10:22:00 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/8/2012 10:22:00 AM
Surr: DNOP	99.0	77.6-140		%REC	1	10/8/2012 10:22:00 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 8:40:29 PM
Surr: BFB	103	84-116		%REC	1	10/6/2012 8:40:29 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:38:40 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 11:00:15 AM
Arsenic	ND	12		mg/Kg	5	10/11/2012 11:00:15 AM
Barium	610	5.0		mg/Kg	50	10/11/2012 12:31:20 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 11:00:15 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 11:00:15 AM
Chromium	11	1.5		mg/Kg	5	10/11/2012 11:00:15 AM
Cobalt	3.3	1.5		mg/Kg	5	10/11/2012 11:00:15 AM
Iron	9200	500		mg/Kg	500	10/11/2012 12:44:37 PM
Lead	3.9	1.2		mg/Kg	5	10/11/2012 11:00:15 AM
Manganese	1300	5.0		mg/Kg	50	10/11/2012 12:31:20 PM
Nickel	4.5	2.5		mg/Kg	5	10/11/2012 11:00:15 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 11:00:15 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 11:00:15 AM
Vanadium	15	12		mg/Kg	5	10/11/2012 11:00:15 AM
Zinc	ND	12		mg/Kg	5	10/11/2012 11:00:15 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:30:00 PM
Lab ID: 1210332-012
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 10:49:25 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 10:49:25 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 10:49:25 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 10:49:25 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 10:49:25 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 10:49:25 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:30:00 PM
Lab ID: 1210332-012
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 10:49:25 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 10:49:25 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 10:49:25 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 10:49:25 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 10:49:25 PM
Surr: 2,4,6-Tribromophenol	96.0	21.3-145		%REC	1	10/9/2012 10:49:25 PM
Surr: 2-Fluorobiphenyl	82.9	20-131		%REC	1	10/9/2012 10:49:25 PM
Surr: 2-Fluorophenol	82.0	11.9-130		%REC	1	10/9/2012 10:49:25 PM
Surr: 4-Terphenyl-d14	76.7	25.1-149		%REC	1	10/9/2012 10:49:25 PM
Surr: Nitrobenzene-d5	80.1	25.6-137		%REC	1	10/9/2012 10:49:25 PM
Surr: Phenol-d5	80.7	20.3-132		%REC	1	10/9/2012 10:49:25 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Toluene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Ethylbenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Xylenes, Total	ND	0.00182		mg/Kg	1	10/9/2012 1:01:16 AM
Methyl tert-butyl ether (MTBE)	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,2,4-Trimethylbenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,3,5-Trimethylbenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,2-Dichloroethane (EDC)	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,2-Dibromoethane (EDB)	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Naphthalene	ND	0.00182		mg/Kg	1	10/9/2012 1:01:16 AM
1-Methylnaphthalene	ND	0.00363		mg/Kg	1	10/9/2012 1:01:16 AM
2-Methylnaphthalene	ND	0.00363		mg/Kg	1	10/9/2012 1:01:16 AM
Acetone	0.0614	0.00909		mg/Kg	1	10/9/2012 1:01:16 AM
Bromobenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Bromodichloromethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Bromoform	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Bromomethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
2-Butanone	0.0142	0.00909		mg/Kg	1	10/9/2012 1:01:16 AM
Carbon tetrachloride	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Chlorobenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Chloroethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:30:00 PM
Lab ID: 1210332-012
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Chloromethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
2-Chlorotoluene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Carbon disulfide	ND	0.00909		mg/Kg	1	10/9/2012 1:01:16 AM
4-Chlorotoluene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
cis-1,2-DCE	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
cis-1,3-Dichloropropene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,2-Dibromo-3-chloropropane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Dibromochloromethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Dibromomethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,2-Dichlorobenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,3-Dichlorobenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,4-Dichlorobenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Dichlorodifluoromethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,1-Dichloroethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,1-Dichloroethene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,2-Dichloropropane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,3-Dichloropropane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
2,2-Dichloropropane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,1-Dichloropropene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Hexachlorobutadiene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Isopropylbenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
4-Isopropyltoluene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Methylene chloride	ND	0.00273		mg/Kg	1	10/9/2012 1:01:16 AM
n-Butylbenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
2-Hexanone	ND	0.00909		mg/Kg	1	10/9/2012 1:01:16 AM
n-Propylbenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
sec-Butylbenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Styrene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
4-Methyl-2-pentanone	ND	0.00909		mg/Kg	1	10/9/2012 1:01:16 AM
tert-Butylbenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,1,1,2-Tetrachloroethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,1,2,2-Tetrachloroethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Tetrachloroethene (PCE)	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
trans-1,2-DCE	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
trans-1,3-Dichloropropene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,2,3-Trichlorobenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,2,4-Trichlorobenzene	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,1,1-Trichloroethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
1,1,2-Trichloroethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Trichloroethene (TCE)	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Trichlorofluoromethane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (10-12')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:30:00 PM
Lab ID: 1210332-012
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Vinyl chloride	ND	0.000909		mg/Kg	1	10/9/2012 1:01:16 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	10/9/2012 1:01:16 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/9/2012 1:01:16 AM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/9/2012 1:01:16 AM
Surr: Toluene-d8	106	70-130		%REC	1	10/9/2012 1:01:16 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (14-16')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:45:00 PM
Lab ID: 1210332-013
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/6/2012 11:24:06 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/6/2012 11:24:06 PM
Surr: DNOP	99.0	77.6-140		%REC	1	10/6/2012 11:24:06 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/6/2012 9:40:48 PM
Surr: BFB	95.0	84-116		%REC	1	10/6/2012 9:40:48 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:40:27 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 11:05:28 AM
Arsenic	ND	12		mg/Kg	5	10/11/2012 11:05:28 AM
Barium	640	5.0		mg/Kg	50	10/11/2012 12:47:28 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 11:05:28 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 11:05:28 AM
Chromium	11	1.5		mg/Kg	5	10/11/2012 11:05:28 AM
Cobalt	3.9	1.5		mg/Kg	5	10/11/2012 11:05:28 AM
Iron	11000	500		mg/Kg	500	10/11/2012 12:49:54 PM
Lead	4.4	1.2		mg/Kg	5	10/11/2012 11:05:28 AM
Manganese	1200	5.0		mg/Kg	50	10/11/2012 12:47:28 PM
Nickel	5.9	2.5		mg/Kg	5	10/11/2012 11:05:28 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 11:05:28 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 11:05:28 AM
Vanadium	19	12		mg/Kg	5	10/11/2012 11:05:28 AM
Zinc	14	12		mg/Kg	5	10/11/2012 11:05:28 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Aniline	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Anthracene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Azobenzene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM

Qualifiers:

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Client Sample ID: SWMU 1-5 (14-16')
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Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Carbazole	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/9/2012 11:18:52 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Chrysene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/9/2012 11:18:52 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/9/2012 11:18:52 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/9/2012 11:18:52 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/9/2012 11:18:52 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/9/2012 11:18:52 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Fluorene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Isophorone	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Naphthalene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (14-16')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:45:00 PM
Lab ID: 1210332-013
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/9/2012 11:18:52 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/9/2012 11:18:52 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/9/2012 11:18:52 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Phenol	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Pyrene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Pyridine	ND	0.50		mg/Kg	1	10/9/2012 11:18:52 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/9/2012 11:18:52 PM
Surr: 2,4,6-Tribromophenol	99.8	21.3-145		%REC	1	10/9/2012 11:18:52 PM
Surr: 2-Fluorobiphenyl	87.7	20-131		%REC	1	10/9/2012 11:18:52 PM
Surr: 2-Fluorophenol	94.2	11.9-130		%REC	1	10/9/2012 11:18:52 PM
Surr: 4-Terphenyl-d14	78.0	25.1-149		%REC	1	10/9/2012 11:18:52 PM
Surr: Nitrobenzene-d5	91.1	25.6-137		%REC	1	10/9/2012 11:18:52 PM
Surr: Phenol-d5	93.7	20.3-132		%REC	1	10/9/2012 11:18:52 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Toluene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Ethylbenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Xylenes, Total	ND	0.00189		mg/Kg	1	10/9/2012 1:32:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,2,4-Trimethylbenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,3,5-Trimethylbenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,2-Dichloroethane (EDC)	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,2-Dibromoethane (EDB)	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Naphthalene	ND	0.00189		mg/Kg	1	10/9/2012 1:32:00 AM
1-Methylnaphthalene	ND	0.00379		mg/Kg	1	10/9/2012 1:32:00 AM
2-Methylnaphthalene	ND	0.00379		mg/Kg	1	10/9/2012 1:32:00 AM
Acetone	0.0891	0.00947		mg/Kg	1	10/9/2012 1:32:00 AM
Bromobenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Bromodichloromethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Bromoform	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Bromomethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
2-Butanone	0.0179	0.00947		mg/Kg	1	10/9/2012 1:32:00 AM
Carbon tetrachloride	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Chlorobenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Chloroethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (14-16')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:45:00 PM
Lab ID: 1210332-013
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Chloromethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
2-Chlorotoluene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Carbon disulfide	ND	0.00947		mg/Kg	1	10/9/2012 1:32:00 AM
4-Chlorotoluene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
cis-1,2-DCE	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
cis-1,3-Dichloropropene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,2-Dibromo-3-chloropropane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Dibromochloromethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Dibromomethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,2-Dichlorobenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,3-Dichlorobenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,4-Dichlorobenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Dichlorodifluoromethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,1-Dichloroethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,1-Dichloroethene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,2-Dichloropropane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,3-Dichloropropane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
2,2-Dichloropropane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,1-Dichloropropene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Hexachlorobutadiene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Isopropylbenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
4-Isopropyltoluene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Methylene chloride	ND	0.00284		mg/Kg	1	10/9/2012 1:32:00 AM
n-Butylbenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
2-Hexanone	ND	0.00947		mg/Kg	1	10/9/2012 1:32:00 AM
n-Propylbenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
sec-Butylbenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Styrene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
4-Methyl-2-pentanone	ND	0.00947		mg/Kg	1	10/9/2012 1:32:00 AM
tert-Butylbenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,1,1,2-Tetrachloroethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,1,2,2-Tetrachloroethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Tetrachloroethene (PCE)	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
trans-1,2-DCE	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
trans-1,3-Dichloropropene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,2,3-Trichlorobenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,2,4-Trichlorobenzene	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,1,1-Trichloroethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
1,1,2-Trichloroethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Trichloroethene (TCE)	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Trichlorofluoromethane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (14-16')
Project: SWMU NO.1
Collection Date: 10/3/2012 5:45:00 PM
Lab ID: 1210332-013
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Vinyl chloride	ND	0.000947		mg/Kg	1	10/9/2012 1:32:00 AM
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%REC	1	10/9/2012 1:32:00 AM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	1	10/9/2012 1:32:00 AM
Surr: Dibromofluoromethane	98.0	70-130		%REC	1	10/9/2012 1:32:00 AM
Surr: Toluene-d8	96.4	70-130		%REC	1	10/9/2012 1:32:00 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (16-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:00:00 PM
Lab ID: 1210332-014
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/6/2012 11:49:13 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/6/2012 11:49:13 PM
Surr: DNOP	97.4	77.6-140		%REC	1	10/6/2012 11:49:13 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/8/2012 7:26:27 PM
Surr: BFB	81.7	84-116	S	%REC	1	10/8/2012 7:26:27 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:42:19 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 11:10:31 AM
Arsenic	ND	12		mg/Kg	5	10/11/2012 11:10:31 AM
Barium	690	5.0		mg/Kg	50	10/11/2012 12:52:45 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 11:10:31 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 11:10:31 AM
Chromium	7.9	1.5		mg/Kg	5	10/11/2012 11:10:31 AM
Cobalt	3.7	1.5		mg/Kg	5	10/11/2012 11:10:31 AM
Iron	15000	500		mg/Kg	500	10/11/2012 12:55:08 PM
Lead	7.7	1.2		mg/Kg	5	10/11/2012 11:10:31 AM
Manganese	1400	5.0		mg/Kg	50	10/11/2012 12:52:45 PM
Nickel	5.1	2.5		mg/Kg	5	10/11/2012 11:10:31 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 11:10:31 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 11:10:31 AM
Vanadium	34	12		mg/Kg	5	10/11/2012 11:10:31 AM
Zinc	ND	12		mg/Kg	5	10/11/2012 11:10:31 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (16-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:00:00 PM
Lab ID: 1210332-014
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 10:20:31 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 10:20:31 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 10:20:31 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 10:20:31 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 10:20:31 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 10:20:31 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (16-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:00:00 PM
Lab ID: 1210332-014
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 10:20:31 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 10:20:31 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 10:20:31 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 10:20:31 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 10:20:31 AM
Surr: 2,4,6-Tribromophenol	89.7	21.3-145		%REC	1	10/10/2012 10:20:31 AM
Surr: 2-Fluorobiphenyl	83.9	20-131		%REC	1	10/10/2012 10:20:31 AM
Surr: 2-Fluorophenol	98.1	11.9-130		%REC	1	10/10/2012 10:20:31 AM
Surr: 4-Terphenyl-d14	70.5	25.1-149		%REC	1	10/10/2012 10:20:31 AM
Surr: Nitrobenzene-d5	91.1	25.6-137		%REC	1	10/10/2012 10:20:31 AM
Surr: Phenol-d5	95.7	20.3-132		%REC	1	10/10/2012 10:20:31 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Toluene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Xylenes, Total	ND	0.00208		mg/Kg	1	10/9/2012 2:02:39 AM
Methyl tert-butyl ether (MTBE)	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Naphthalene	ND	0.00208		mg/Kg	1	10/9/2012 2:02:39 AM
1-Methylnaphthalene	ND	0.00417		mg/Kg	1	10/9/2012 2:02:39 AM
2-Methylnaphthalene	ND	0.00417		mg/Kg	1	10/9/2012 2:02:39 AM
Acetone	0.0379	0.0104		mg/Kg	1	10/9/2012 2:02:39 AM
Bromobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Bromoform	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Bromomethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
2-Butanone	ND	0.0104		mg/Kg	1	10/9/2012 2:02:39 AM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Chloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (16-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:00:00 PM
Lab ID: 1210332-014
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Chloromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/9/2012 2:02:39 AM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Dibromomethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Methylene chloride	ND	0.00313		mg/Kg	1	10/9/2012 2:02:39 AM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
2-Hexanone	ND	0.0104		mg/Kg	1	10/9/2012 2:02:39 AM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Styrene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/9/2012 2:02:39 AM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (16-18')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:00:00 PM
Lab ID: 1210332-014
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/9/2012 2:02:39 AM
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%REC	1	10/9/2012 2:02:39 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1	10/9/2012 2:02:39 AM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/9/2012 2:02:39 AM
Surr: Toluene-d8	102	70-130		%REC	1	10/9/2012 2:02:39 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (24-25')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:10:00 PM
Lab ID: 1210332-015
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/7/2012 12:14:21 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/7/2012 12:14:21 AM
Surr: DNOP	95.8	77.6-140		%REC	1	10/7/2012 12:14:21 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/8/2012 7:56:22 PM
Surr: BFB	88.5	84-116		%REC	1	10/8/2012 7:56:22 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/9/2012 11:29:40 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 2:22:14 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 11:29:11 AM
Barium	630	5.0		mg/Kg	50	10/11/2012 12:57:46 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 11:29:11 AM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 11:29:11 AM
Chromium	7.7	1.5		mg/Kg	5	10/11/2012 11:29:11 AM
Cobalt	3.5	1.5		mg/Kg	5	10/11/2012 11:29:11 AM
Iron	8700	500		mg/Kg	500	10/11/2012 1:00:09 PM
Lead	3.5	1.2		mg/Kg	5	10/11/2012 11:29:11 AM
Manganese	1200	5.0		mg/Kg	50	10/11/2012 12:57:46 PM
Nickel	4.9	2.5		mg/Kg	5	10/11/2012 11:29:11 AM
Selenium	ND	12		mg/Kg	5	10/11/2012 11:29:11 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 11:29:11 AM
Vanadium	14	12		mg/Kg	5	10/11/2012 11:29:11 AM
Zinc	ND	12		mg/Kg	5	10/11/2012 11:29:11 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (24-25')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:10:00 PM
Lab ID: 1210332-015
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 2:35:58 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 2:35:58 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 2:35:58 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 2:35:58 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 2:35:58 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 2:35:58 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (24-25')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:10:00 PM
Lab ID: 1210332-015
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 2:35:58 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 2:35:58 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 2:35:58 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 2:35:58 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 2:35:58 AM
Surr: 2,4,6-Tribromophenol	84.6	21.3-145		%REC	1	10/10/2012 2:35:58 AM
Surr: 2-Fluorobiphenyl	87.7	20-131		%REC	1	10/10/2012 2:35:58 AM
Surr: 2-Fluorophenol	84.5	11.9-130		%REC	1	10/10/2012 2:35:58 AM
Surr: 4-Terphenyl-d14	80.6	25.1-149		%REC	1	10/10/2012 2:35:58 AM
Surr: Nitrobenzene-d5	101	25.6-137		%REC	1	10/10/2012 2:35:58 AM
Surr: Phenol-d5	92.9	20.3-132		%REC	1	10/10/2012 2:35:58 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00403	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Toluene	0.00910	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Xylenes, Total	ND	0.00207		mg/Kg	1	10/9/2012 2:33:23 AM
Methyl tert-butyl ether (MTBE)	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Naphthalene	ND	0.00207		mg/Kg	1	10/9/2012 2:33:23 AM
1-Methylnaphthalene	ND	0.00414		mg/Kg	1	10/9/2012 2:33:23 AM
2-Methylnaphthalene	ND	0.00414		mg/Kg	1	10/9/2012 2:33:23 AM
Acetone	0.0485	0.0104		mg/Kg	1	10/9/2012 2:33:23 AM
Bromobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Bromoform	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Bromomethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
2-Butanone	ND	0.0104		mg/Kg	1	10/9/2012 2:33:23 AM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Chloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (24-25')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:10:00 PM
Lab ID: 1210332-015
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Chloromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/9/2012 2:33:23 AM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Dibromomethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Methylene chloride	ND	0.00311		mg/Kg	1	10/9/2012 2:33:23 AM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
2-Hexanone	ND	0.0104		mg/Kg	1	10/9/2012 2:33:23 AM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Styrene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/9/2012 2:33:23 AM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 (24-25')
Project: SWMU NO.1
Collection Date: 10/3/2012 6:10:00 PM
Lab ID: 1210332-015
Matrix: SOIL
Received Date: 10/5/2012 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/9/2012 2:33:23 AM
Surr: 1,2-Dichloroethane-d4	118	70-130		%REC	1	10/9/2012 2:33:23 AM
Surr: 4-Bromofluorobenzene	81.0	70-130		%REC	1	10/9/2012 2:33:23 AM
Surr: Dibromofluoromethane	99.8	70-130		%REC	1	10/9/2012 2:33:23 AM
Surr: Toluene-d8	97.9	70-130		%REC	1	10/9/2012 2:33:23 AM

Qualifiers:

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

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

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

Batch #: 121009047
Project Name: 1210332

Analytical Results Report

Sample Number 121009047-001 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-001D / SWMU 1-4 (10-12)DUP **Sampling Time** 1:15 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	11.8	Percent				%moisture	

Sample Number 121009047-002 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-002D / SWMU 1-4 (17-18) **Sampling Time** 1:45 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.59	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	21	Percent				%moisture	

Sample Number 121009047-003 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-003D / SWMU 1-4 (23-24) **Sampling Time** 2:00 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	16.4	Percent				%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121009047
Project Name: 1210332

Analytical Results Report

Sample Number 121009047-004 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-005F / SWMU 1-3 GW **Sampling Time** 9:30 AM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0325	mg/L	0.01	10/16/2012	CRW	EPA 335.4	

Sample Number 121009047-005 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-006D / SWMU 1-4 (8-10) **Sampling Time** 1:00 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/15/2012	CRW	EPA 335.4	
%moisture	13.2	Percent				%moisture	

Sample Number 121009047-006 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-007D / SWMU 1-4 (10-12) **Sampling Time** 1:15 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	10.5	Percent				%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121009047
Project Name: 1210332

Analytical Results Report

Sample Number 121009047-007 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-008D / SWMU 1-5 (26-27) **Sampling Time** 6:20 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	19	Percent				%moisture	

Sample Number 121009047-008 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-009D / SWMU 1-5 (27-28) **Sampling Time** 6:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	12.5	Percent				%moisture	

Sample Number 121009047-009 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-010F / EB100312 **Sampling Time** 6:44 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/16/2012	CRW	EPA 335.4	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121009047
Project Name: 1210332

Analytical Results Report

Sample Number 121009047-010 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-012D / SWMU 1-5 (10-12) **Sampling Time** 5:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	8.5	Percent				%moisture	

Sample Number 121009047-011 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-013D / SWMU 1-5 (14-16) **Sampling Time** 5:45 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	12.6	Percent				%moisture	

Sample Number 121009047-012 **Sampling Date** 10/3/2012 **Date/Time Received** 10/9/2012 12:00 P
Client Sample ID 1210332-014D / SWMU 1-5 (16-18) **Sampling Time** 6:00 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	10.9	Percent				%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	121009047
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1210332
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	121009047-013	**Sampling Date**	10/3/2012	**Date/Time Received**	10/9/2012 12:00 P
Client Sample ID	1210332-015D / SWMU 1-5 (24-25)			**Sampling Time**	6:10 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	16.1	Percent				%moisture	

Authorized Signature

John Coddington, Lab Manager

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

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **176939** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **176940** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.6	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.50	0.0020	0.5000	0	100	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.2	85	115			
Iron	0.49	0.020	0.5000	0	98.1	85	115			
Manganese	0.49	0.0020	0.5000	0	97.7	85	115			
Nickel	0.47	0.010	0.5000	0	94.9	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			

Sample ID **1210368-001BMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177005** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0.02430	96.8	70	130			
Beryllium	0.51	0.0020	0.5000	0	102	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.8	70	130			

Sample ID **1210368-001BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177006** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0.02430	97.1	70	130	0.302	20	
Beryllium	0.52	0.0020	0.5000	0	103	70	130	0.724	20	
Cadmium	0.50	0.0020	0.5000	0	99.0	70	130	1.24	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178907** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178908** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Zinc	0.51	0.010	0.5000	0	101	85	115			

Sample ID **1210368-001BMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178913** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	101	70	130			

Sample ID **1210368-001BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178914** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	99.2	70	130	1.42	20	

Sample ID **MB-4293** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4293** RunNo: **6265**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180580** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS-4293** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **4293** RunNo: **6265**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180581** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Beryllium	0.53	0.0020	0.5000	0	106	85	115			
Cadmium	0.53	0.0020	0.5000	0	106	85	115			
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Cobalt	0.50	0.0060	0.5000	0	101	85	115			
Iron	0.51	0.020	0.5000	0	102	85	115			
Manganese	0.51	0.0020	0.5000	0	101	85	115			
Nickel	0.49	0.010	0.5000	0	98.2	85	115			
Silver	0.11	0.0050	0.1000	0	107	85	115			
Vanadium	0.52	0.050	0.5000	0	105	85	115			
Zinc	0.50	0.010	0.5000	0	101	85	115			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4293** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **4293** RunNo: **6249**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **179961** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								
Selenium	ND	0.0025								

Sample ID **1210046-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181878** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.027	0.0010	0.02500	0.001891	99.5	70	130			

Sample ID **1210367-001BMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181885** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.6	70	130			
Arsenic	0.035	0.0010	0.02500	0.01018	101	70	130			
Selenium	0.031	0.0010	0.02500	0.005490	104	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181905** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.9	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181906** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.6	85	115			
Selenium	0.027	0.0010	0.02500	0	106	85	115			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181907** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.7	85	115			
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181909** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181910** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181911** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1210585-001CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181948** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	70	130			
Arsenic	0.026	0.0010	0.02500	0	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210585-001CMS**	SampType:	**MS**	TestCode:	**EPA 200.8: Metals**
Client ID:	**BatchQC**	Batch ID:	**R6315**	RunNo:	**6315**
Prep Date:		Analysis Date:	**10/17/2012**	SeqNo:	**181948** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.025	0.0010	0.02500	0	99.7	70	130			
Selenium	0.026	0.0010	0.02500	0	105	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4279** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179065** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-4279** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179066** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.0	80	120			

Sample ID **1210332-010EMS** SampType: **MS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **EB100312** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179069** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.9	75	125			

Sample ID **1210332-010EMSD** SampType: **MSD** TestCode: **EPA Method 245.1: Mercury**
Client ID: **EB100312** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179072** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.7	75	125	0.749	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **173988** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **173989** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.7	90	110			
Chloride	4.6	0.50	5.000	0	91.4	90	110			
Sulfate	9.0	0.50	10.00	0	90.2	90	110			

Sample ID **1210309-005AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174013** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.2	0.10	0.5000	1.745	84.0	76.6	110			

Sample ID **1210309-005AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174014** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.2	0.10	0.5000	1.745	87.2	76.6	110	0.741	20	

Sample ID **1210320-001AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174024** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.4	0.10	0.5000	0.9401	92.6	76.6	110			

Sample ID **1210320-001AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174025** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.4	0.10	0.5000	0.9401	93.5	76.6	110	0.313	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174043** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174044** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	102	90	110			
Chloride	4.8	0.50	5.000	0	96.7	90	110			
Sulfate	9.8	0.50	10.00	0	97.7	90	110			

Sample ID **1210361-003AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174065** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.92	0.10	0.5000	0.4398	96.0	76.6	110			
Chloride	10	0.50	5.000	4.860	105	87.8	111			
Sulfate	10	0.50	10.00	0.6275	94.7	84.6	122			

Sample ID **1210361-003AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6038** RunNo: **6038**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174066** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.91	0.10	0.5000	0.4398	94.5	76.6	110	0.797	20	
Chloride	10	0.50	5.000	4.860	106	87.8	111	0.396	20	
Sulfate	10	0.50	10.00	0.6275	95.7	84.6	122	0.930	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6177** RunNo: **6177**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178038** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSW**	Batch ID:	**R6177**	RunNo:	**6177**					
Prep Date:		Analysis Date:	**10/11/2012**	SeqNo:	**178039**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.2	90	110			

Sample ID	**1210607-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID:	**R6177**	RunNo:	**6177**					
Prep Date:		Analysis Date:	**10/11/2012**	SeqNo:	**178041**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.5	0.50	5.000	4.628	97.8	87.8	111			

Sample ID	**1210607-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID:	**R6177**	RunNo:	**6177**					
Prep Date:		Analysis Date:	**10/11/2012**	SeqNo:	**178042**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.6	0.50	5.000	4.628	98.5	87.8	111	0.323	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4148**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Diesel Range Organics**
Client ID:	**PBS**	Batch ID:	**4148**	RunNo:	**6027**
Prep Date:	**10/5/2012**	Analysis Date:	**10/6/2012**	SeqNo:	**173597** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	77.6	140			

Sample ID	**LCS-4148**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range Organics**
Client ID:	**LCSS**	Batch ID:	**4148**	RunNo:	**6027**
Prep Date:	**10/5/2012**	Analysis Date:	**10/6/2012**	SeqNo:	**173599** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	10	50.00	0	70.2	52.6	130			
Surr: DNOP	4.4		5.000		87.4	77.6	140			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4137**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Diesel Range**				
Client ID:	**PBW**	Batch ID:	**4137**	RunNo:	**6039**				
Prep Date:	**10/5/2012**	Analysis Date:	**10/8/2012**	SeqNo:	**174081**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		108	79.5	166			

Sample ID	**LCS-4137**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range**				
Client ID:	**LCSW**	Batch ID:	**4137**	RunNo:	**6039**				
Prep Date:	**10/5/2012**	Analysis Date:	**10/8/2012**	SeqNo:	**174082**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.2	1.0	5.000	0	104	74	157			
Surr: DNOP	0.45		0.5000		90.2	79.5	166			

Sample ID	**LCSD-4137**	SampType:	**LCSD**	TestCode:	**EPA Method 8015B: Diesel Range**				
Client ID:	**LCSS02**	Batch ID:	**4137**	RunNo:	**6039**				
Prep Date:	**10/5/2012**	Analysis Date:	**10/8/2012**	SeqNo:	**174083**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	109	74	157	5.45	23	
Surr: DNOP	0.45		0.5000		90.8	79.5	166	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **173460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **173461** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.0	74	117			
Surr: BFB	820		1000		82.5	84	116			S

Sample ID **1210279-011BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **173465** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	12	5.0	15.46	0	78.9	70	130			
Surr: BFB	670		618.5		108	84	116			

Sample ID **1210279-011BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **173466** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	5.0	15.46	0	90.8	70	130	14.0	22.1	
Surr: BFB	650		618.5		105	84	116	0	0	

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6043** RunNo: **6043**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174099** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6043** RunNo: **6043**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174100** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.6	74	117			
Surr: BFB	870		1000		87.0	84	116			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

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WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210332-013BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-5 (14-16')** Batch ID: **R6043** RunNo: **6043**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174108** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	17.66	0	84.7	70	130			
Surr: BFB	610		706.4		85.8	84	116			

Sample ID **1210332-013BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-5 (14-16')** Batch ID: **R6043** RunNo: **6043**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174109** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	17.66	0	87.1	70	130	2.79	22.1	
Surr: BFB	670		706.4		95.3	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT
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WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6020** RunNo: **6020**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **173451** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	21		20.00		104	69.8	119			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6043** RunNo: **6043**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174095** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	21		20.00		105	69.8	119			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6043** RunNo: **6043**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174096** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.47	0.050	0.5000	0	93.6	75.9	119			
Surr: BFB	17		20.00		87.0	69.8	119			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6074** RunNo: **6074**
Prep Date: Analysis Date: **10/8/2012** SeqNo: **175153** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	20		20.00		99.3	69.8	119			

Sample ID **2.5UG GRO LCSB** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6074** RunNo: **6074**
Prep Date: Analysis Date: **10/8/2012** SeqNo: **175154** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.47	0.050	0.5000	0	93.3	75.9	119			
Surr: BFB	16		20.00		81.2	69.8	119			

Sample ID **1210333-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6074** RunNo: **6074**
Prep Date: Analysis Date: **10/9/2012** SeqNo: **175202** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	63.5	131			
Surr: BFB	23		20.00		117	69.8	119			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210333-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015B: Gasoline Range**
Client ID:	**BatchQC**	Batch ID:	**R6074**	RunNo:	**6074**
Prep Date:		Analysis Date:	**10/9/2012**	SeqNo:	**175203** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.47	0.050	0.5000	0	95.0	63.5	131	2.99	16.7	
Surr: BFB	24		20.00		122	69.8	119	0	0	S

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4139**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4139**	RunNo: **6123**			
Prep Date: **10/5/2012**	Analysis Date: **10/8/2012**	SeqNo: **176473**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4139** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4139** RunNo: **6123**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **176473** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.5		50.00		86.9	70	130			
Surr: 4-Bromofluorobenzene	48.2		50.00		96.4	70	130			
Surr: Dibromofluoromethane	51.1		50.00		102	70	130			
Surr: Toluene-d8	48.6		50.00		97.1	70	130			

Sample ID **lcs-4139** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4139** RunNo: **6123**
Prep Date: **10/5/2012** Analysis Date: **10/8/2012** SeqNo: **176475** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	10.6	1.00	10.00	0	106	60	140			
Toluene	9.55	1.00	10.00	0	95.5	60	140			
Chlorobenzene	9.91	1.00	10.00	0	99.1	60	140			
1,1-Dichloroethene	11.6	1.00	10.00	0	116	60	140			
Trichloroethene (TCE)	9.40	1.00	10.00	0	94.0	60	140			
Surr: 1,2-Dichloroethane-d4	45.7		50.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	39.6		50.00		79.3	70	130			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
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WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4139**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4139**	RunNo:	**6123**
Prep Date:	**10/5/2012**	Analysis Date:	**10/8/2012**	SeqNo:	**176475** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	49.3		50.00		98.5	70	130			
Surr: Toluene-d8	47.1		50.00		94.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT
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WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6048**	RunNo: **6048**			
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **174216**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174216** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	8.1		10.00		80.6	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	7.9		10.00		79.4	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174218** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	70	130			
Toluene	18	1.0	20.00	0	90.7	80	120			
Chlorobenzene	17	1.0	20.00	0	85.9	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.8	73.7	122			
Trichloroethene (TCE)	17	1.0	20.00	0	84.3	70	130			
Surr: 1,2-Dichloroethane-d4	8.3		10.00		82.6	70	130			
Surr: 4-Bromofluorobenzene	7.8		10.00		78.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174218** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.9		10.00		99.0	70	130			
Surr: Toluene-d8	7.8		10.00		78.4	70	130			

Sample ID **1210179-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174222** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	66.8	128			
Toluene	20	1.0	20.00	0	99.4	70	130			
Chlorobenzene	18	1.0	20.00	0	90.5	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	103	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.5	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		85.7	70	130			
Surr: 4-Bromofluorobenzene	8.5		10.00		84.9	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	8.1		10.00		81.2	70	130			

Sample ID **1210179-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174223** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.8	66.8	128	3.35	16.7	
Toluene	19	1.0	20.00	0	96.1	70	130	3.34	18.7	
Chlorobenzene	18	1.0	20.00	0	90.9	70	130	0.385	19.5	
1,1-Dichloroethene	20	1.0	20.00	0	97.6	70	130	5.89	16.7	
Trichloroethene (TCE)	16	1.0	20.00	0	79.2	70	130	7.68	17.5	
Surr: 1,2-Dichloroethane-d4	8.3		10.00		83.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.3		10.00		83.4	70	130	0	0	
Surr: Dibromofluoromethane	9.8		10.00		97.9	70	130	0	0	
Surr: Toluene-d8	8.1		10.00		81.2	70	130	0	0	

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174241** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R6048**	RunNo: **6048**	
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **174241**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174241** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.2		10.00		82.4	70	130			
Surr: 4-Bromofluorobenzene	8.3		10.00		82.8	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.0	70	130			
Surr: Toluene-d8	8.1		10.00		81.1	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/5/2012** SeqNo: **174243** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	93.1	80	120			
Chlorobenzene	17	1.0	20.00	0	87.4	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	104	73.7	122			
Trichloroethene (TCE)	17	1.0	20.00	0	84.8	70	130			
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.6	70	130			
Surr: 4-Bromofluorobenzene	8.3		10.00		83.3	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	7.9		10.00		78.6	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210340-003a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174249** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	380	20	400.0	0	95.3	70	130			
1,1-Dichloroethene	410	20	400.0	0	103	70	130			
Trichloroethene (TCE)	350	20	400.0	0	88.7	70	130			
Surr: 1,2-Dichloroethane-d4	170		200.0		83.2	70	130			
Surr: 4-Bromofluorobenzene	160		200.0		77.8	70	130			
Surr: Dibromofluoromethane	200		200.0		101	70	130			
Surr: Toluene-d8	160		200.0		79.7	70	130			

Sample ID **1210340-003a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6048** RunNo: **6048**
Prep Date: Analysis Date: **10/6/2012** SeqNo: **174250** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	360	20	400.0	0	90.7	70	130	5.00	19.5	
1,1-Dichloroethene	380	20	400.0	0	95.9	70	130	7.00	16.7	
Trichloroethene (TCE)	330	20	400.0	0	82.9	70	130	6.82	17.5	
Surr: 1,2-Dichloroethane-d4	170		200.0		84.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	160		200.0		79.7	70	130	0	0	
Surr: Dibromofluoromethane	200		200.0		99.6	70	130	0	0	
Surr: Toluene-d8	160		200.0		80.6	70	130	0	0	

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6255** RunNo: **6255**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180303** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6255**	RunNo: **6255**			
Prep Date:	Analysis Date: **10/15/2012**	SeqNo: **180303**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6255** RunNo: **6255**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180303** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6255** RunNo: **6255**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180305** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	92.3	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	92.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.2	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.3	70	130			
Surr: Toluene-d8	9.4		10.00		93.9	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4140**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4140**	RunNo: **6106**			
Prep Date: **10/5/2012**	Analysis Date: **10/9/2012**	SeqNo: **176018**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4140** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176018** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.3		3.330		68.7	21.3	145			
Surr: 2-Fluorobiphenyl	0.94		1.670		56.2	20	131			
Surr: 2-Fluorophenol	2.0		3.330		59.6	11.9	130			
Surr: 4-Terphenyl-d14	0.96		1.670		57.5	25.1	149			
Surr: Nitrobenzene-d5	1.0		1.670		59.9	25.6	137			
Surr: Phenol-d5	2.1		3.330		62.9	20.3	132			

Sample ID **lcs-4140** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176019** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4140** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176019** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.99	0.20	1.670	0	59.5	49.7	98.1			
4-Chloro-3-methylphenol	2.2	0.50	3.330	0	65.1	43.8	89.1			
2-Chlorophenol	1.9	0.20	3.330	0	57.0	41.1	96.9			
1,4-Dichlorobenzene	0.91	0.20	1.670	0	54.6	41	97.4			
2,4-Dinitrotoluene	1.2	0.50	1.670	0	70.7	44.4	104			
N-Nitrosodi-n-propylamine	1.1	0.20	1.670	0	65.0	39.1	86.9			
4-Nitrophenol	2.1	0.25	3.330	0	62.6	44.2	107			
Pentachlorophenol	1.5	0.40	3.330	0	44.9	36.2	80			
Phenol	2.0	0.20	3.330	0	60.0	42.7	92.7			
Pyrene	0.90	0.20	1.670	0	53.9	34.7	98.8			
1,2,4-Trichlorobenzene	0.88	0.20	1.670	0	52.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.5		3.330		74.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.1		1.670		66.2	20	131			
Surr: 2-Fluorophenol	1.9		3.330		55.8	11.9	130			
Surr: 4-Terphenyl-d14	1.1		1.670		64.8	25.1	149			
Surr: Nitrobenzene-d5	1.0		1.670		60.3	25.6	137			
Surr: Phenol-d5	2.1		3.330		63.6	20.3	132			

Sample ID **1210279-012CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176040** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.20	1.684	0	76.6	38.6	100			
4-Chloro-3-methylphenol	2.7	0.50	3.358	0	79.2	35.8	108			
2-Chlorophenol	2.4	0.20	3.358	0	72.3	48.2	96.1			
1,4-Dichlorobenzene	1.1	0.20	1.684	0	66.4	42.5	97.6			
2,4-Dinitrotoluene	1.6	0.50	1.684	0	92.4	51.2	108			
N-Nitrosodi-n-propylamine	1.1	0.20	1.684	0	67.5	31.6	114			
4-Nitrophenol	2.8	0.25	3.358	0	82.3	22.7	144			
Pentachlorophenol	2.1	0.40	3.358	0	61.1	24	109			
Phenol	2.6	0.20	3.358	0	76.4	33.1	108			
Pyrene	1.2	0.20	1.684	0	69.2	42.7	98.9			
1,2,4-Trichlorobenzene	1.1	0.20	1.684	0	64.3	27.1	118			
Surr: 2,4,6-Tribromophenol	2.9		3.358		86.1	21.3	145			
Surr: 2-Fluorobiphenyl	1.2		1.684		73.8	20	131			
Surr: 2-Fluorophenol	2.5		3.358		75.3	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.684		70.1	25.1	149			
Surr: Nitrobenzene-d5	1.2		1.684		73.1	25.6	137			
Surr: Phenol-d5	2.7		3.358		79.5	20.3	132			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210279-012CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4140** RunNo: **6106**
Prep Date: **10/5/2012** Analysis Date: **10/9/2012** SeqNo: **176041** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.667	0	74.1	38.6	100	4.39	20	
4-Chloro-3-methylphenol	2.7	0.50	3.324	0	82.1	35.8	108	2.56	20	
2-Chlorophenol	2.3	0.20	3.324	0	68.8	48.2	96.1	5.93	20	
1,4-Dichlorobenzene	1.0	0.20	1.667	0	62.1	42.5	97.6	7.84	20	
2,4-Dinitrotoluene	1.6	0.50	1.667	0	95.5	51.2	108	2.29	20	
N-Nitrosodi-n-propylamine	1.1	0.20	1.667	0	66.7	31.6	114	2.25	20	
4-Nitrophenol	2.9	0.25	3.324	0	88.4	22.7	144	6.14	20	
Pentachlorophenol	2.1	0.40	3.324	0	64.0	24	109	3.56	20	
Phenol	2.3	0.20	3.324	0	69.6	33.1	108	10.3	20	
Pyrene	1.2	0.20	1.667	0	71.4	42.7	98.9	2.04	20	
1,2,4-Trichlorobenzene	1.1	0.20	1.667	0	66.7	27.1	118	2.65	20	
Surr: 2,4,6-Tribromophenol	3.0		3.324		89.8	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.2		1.667		71.8	20	131	0	0	
Surr: 2-Fluorophenol	2.4		3.324		72.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.2		1.667		72.5	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.3		1.667		76.8	25.6	137	0	0	
Surr: Phenol-d5	2.6		3.324		77.9	20.3	132	0	0	

Sample ID **mb-4168** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **176042** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4168**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4168**	RunNo: **6106**			
Prep Date: **10/8/2012**	Analysis Date: **10/10/2012**	SeqNo: **176042**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4168** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **176042** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.8		3.330		84.5	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		88.5	20	131			
Surr: 2-Fluorophenol	2.9		3.330		85.8	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		77.1	25.1	149			
Surr: Nitrobenzene-d5	1.5		1.670		90.5	25.6	137			
Surr: Phenol-d5	3.1		3.330		94.0	20.3	132			

Sample ID **lcs-4168** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **176043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.20	1.670	0	77.2	49.7	98.1			
4-Chloro-3-methylphenol	2.9	0.50	3.330	0	87.8	43.8	89.1			
2-Chlorophenol	2.8	0.20	3.330	0	83.6	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	75.1	41	97.4			
2,4-Dinitrotoluene	1.7	0.50	1.670	0	99.6	44.4	104			
N-Nitrosodi-n-propylamine	1.5	0.20	1.670	0	88.3	39.1	86.9			S
4-Nitrophenol	3.0	0.25	3.330	0	88.8	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	64.1	36.2	80			
Phenol	2.7	0.20	3.330	0	80.3	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	74.5	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	77.2	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.4	21.3	145			
Surr: 2-Fluorobiphenyl	1.4		1.670		85.7	20	131			
Surr: 2-Fluorophenol	2.6		3.330		77.1	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		74.9	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		82.0	25.6	137			
Surr: Phenol-d5	2.8		3.330		83.8	20.3	132			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210372-001BMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **177069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	2.1	1.0	1.673	0	127	38.6	100			S
4-Chloro-3-methylphenol	2.5	2.5	3.336	0	75.3	35.8	108			
2-Chlorophenol	2.2	1.0	3.336	0	65.8	48.2	96.1			
1,4-Dichlorobenzene	ND	1.0	1.673	0	57.2	42.5	97.6			
2,4-Dinitrotoluene	ND	2.5	1.673	0	65.9	51.2	108			
N-Nitrosodi-n-propylamine	ND	1.0	1.673	0	0	31.6	114			S
4-Nitrophenol	ND	1.3	3.336	0	0	22.7	144			S
Pentachlorophenol	ND	2.0	3.336	0	53.4	24	109			
Phenol	2.0	1.0	3.336	0	61.3	33.1	108			
Pyrene	1.7	1.0	1.673	1.458	12.8	42.7	98.9			S
1,2,4-Trichlorobenzene	1.1	1.0	1.673	0	68.7	27.1	118			
Surr: 2,4,6-Tribromophenol	1.8		3.336		55.0	21.3	145			
Surr: 2-Fluorobiphenyl	1.2		1.673		69.0	20	131			
Surr: 2-Fluorophenol	2.1		3.336		62.7	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.673		73.7	25.1	149			
Surr: Nitrobenzene-d5	0		1.673		0	25.6	137			S
Surr: Phenol-d5	2.2		3.336		67.4	20.3	132			

Sample ID **1210372-001BMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **177070** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	2.2	0.99	1.661	0	132	38.6	100	3.07	20	S
4-Chloro-3-methylphenol	2.8	2.5	3.312	0	85.5	35.8	108	12.0	20	
2-Chlorophenol	2.5	0.99	3.312	0	76.2	48.2	96.1	14.0	20	
1,4-Dichlorobenzene	1.1	0.99	1.661	0	65.5	42.5	97.6	12.8	20	
2,4-Dinitrotoluene	ND	2.5	1.661	0	63.3	51.2	108	0	20	
N-Nitrosodi-n-propylamine	ND	0.99	1.661	0	0	31.6	114	0	20	S
4-Nitrophenol	3.5	1.2	3.312	0	107	22.7	144	200	20	R
Pentachlorophenol	ND	2.0	3.312	0	59.1	24	109	0	20	
Phenol	2.4	0.99	3.312	0	73.9	33.1	108	18.0	20	
Pyrene	2.0	0.99	1.661	1.458	31.7	42.7	98.9	17.1	20	S
1,2,4-Trichlorobenzene	1.2	0.99	1.661	0	75.0	27.1	118	8.06	20	
Surr: 2,4,6-Tribromophenol	2.3		3.312		70.5	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.3		1.661		79.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.312		74.6	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.661		78.0	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.3		1.661		80.2	25.6	137	0	0	
Surr: Phenol-d5	2.7		3.312		82.1	20.3	132	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4133**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4133**	RunNo: **6007**			
Prep Date: **10/5/2012**	Analysis Date: **10/5/2012**	SeqNo: **173071**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4133**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4133**	RunNo: **6007**			
Prep Date: **10/5/2012**	Analysis Date: **10/5/2012**	SeqNo: **173071**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	160		200.0		80.9	44.2	126			
Surr: 2-Fluorobiphenyl	77		100.0		77.2	37	114			
Surr: 2-Fluorophenol	130		200.0		66.0	23.4	98			
Surr: 4-Terphenyl-d14	72		100.0		71.9	41.3	116			
Surr: Nitrobenzene-d5	76		100.0		76.3	39.5	118			
Surr: Phenol-d5	120		200.0		58.2	20.9	95.9			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4133** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **4133** RunNo: **6007**
Prep Date: **10/5/2012** Analysis Date: **10/5/2012** SeqNo: **173072** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	61	10	100.0	0	61.0	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.6	35.5	108			
2-Chlorophenol	140	10	200.0	0	70.5	29.8	106			
1,4-Dichlorobenzene	65	10	100.0	0	65.4	32.6	91.5			
2,4-Dinitrotoluene	67	10	100.0	0	67.0	44.7	112			
N-Nitrosodi-n-propylamine	73	10	100.0	0	72.6	38.5	105			
4-Nitrophenol	92	10	200.0	0	45.9	11.6	73.1			
Pentachlorophenol	95	20	200.0	0	47.6	20.2	93			
Phenol	120	10	200.0	0	60.3	23	66.1			
Pyrene	61	10	100.0	0	61.4	40.1	101			
1,2,4-Trichlorobenzene	62	10	100.0	0	62.0	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		78.1	44.2	126			
Surr: 2-Fluorobiphenyl	72		100.0		72.4	37	114			
Surr: 2-Fluorophenol	140		200.0		71.2	23.4	98			
Surr: 4-Terphenyl-d14	64		100.0		64.3	41.3	116			
Surr: Nitrobenzene-d5	72		100.0		72.1	39.5	118			
Surr: Phenol-d5	130		200.0		66.7	20.9	95.9			

Sample ID **lcsd-4133** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **4133** RunNo: **6007**
Prep Date: **10/5/2012** Analysis Date: **10/5/2012** SeqNo: **173073** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	64	10	100.0	0	64.1	38.2	99.4	4.96	20	
4-Chloro-3-methylphenol	170	10	200.0	0	83.6	35.5	108	15.4	20	
2-Chlorophenol	130	10	200.0	0	67.2	29.8	106	4.72	20	
1,4-Dichlorobenzene	65	10	100.0	0	64.5	32.6	91.5	1.32	20	
2,4-Dinitrotoluene	78	10	100.0	0	78.4	44.7	112	15.7	20	
N-Nitrosodi-n-propylamine	69	10	100.0	0	68.5	38.5	105	5.84	20	
4-Nitrophenol	110	10	200.0	0	53.4	11.6	73.1	15.1	20	
Pentachlorophenol	100	20	200.0	0	50.6	20.2	93	6.13	20	
Phenol	120	10	200.0	0	59.0	23	66.1	2.26	20	
Pyrene	67	10	100.0	0	66.7	40.1	101	8.21	20	
1,2,4-Trichlorobenzene	61	10	100.0	0	61.0	37.7	99.1	1.56	20	
Surr: 2,4,6-Tribromophenol	150		200.0		76.3	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	69		100.0		68.6	37	114	0	0	
Surr: 2-Fluorophenol	130		200.0		66.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	67		100.0		66.9	41.3	116	0	0	
Surr: Nitrobenzene-d5	72		100.0		72.1	39.5	118	0	0	
Surr: Phenol-d5	120		200.0		58.6	20.9	95.9	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4150** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4150** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175512** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4150** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4150** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175513** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1667	0	117	80	120			

Sample ID **1210332-015CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-5 (24-25')** Batch ID: **4150** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175534** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1635	0	108	75	125			

Sample ID **1210332-015CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-5 (24-25')** Batch ID: **4150** RunNo: **6082**
Prep Date: **10/8/2012** Analysis Date: **10/9/2012** SeqNo: **175535** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1662	0	108	75	125	1.95	20	

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4190**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**		
Client ID:	**PBS**	Batch ID:	**4190**	RunNo:	**6121**		
Prep Date:	**10/9/2012**	Analysis Date:	**10/10/2012**	SeqNo:	**176356**	Units:	**mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	**LCS-4190**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**		
Client ID:	**LCSS**	Batch ID:	**4190**	RunNo:	**6121**		
Prep Date:	**10/9/2012**	Analysis Date:	**10/10/2012**	SeqNo:	**176357**	Units:	**mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	96.0	80	120			
Arsenic	25	2.5	25.00	0	99.3	80	120			
Beryllium	25	0.15	25.00	0	102	80	120			
Cadmium	25	0.10	25.00	0.04000	100	80	120			
Chromium	25	0.30	25.00	0	99.1	80	120			
Iron	25	1.0	25.00	0	99.9	80	120			
Lead	25	0.25	25.00	0	99.4	80	120			
Manganese	25	0.10	25.00	0.03400	98.1	80	120			
Nickel	24	0.50	25.00	0	95.7	80	120			
Selenium	23	2.5	25.00	0	91.4	80	120			
Silver	5.1	0.25	5.000	0	103	80	120			
Vanadium	25	2.5	25.00	0	101	80	120			
Zinc	25	2.5	25.00	1.304	95.8	80	120			

Sample ID	**MB-4190**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**		
Client ID:	**PBS**	Batch ID:	**4190**	RunNo:	**6163**		
Prep Date:	**10/9/2012**	Analysis Date:	**10/11/2012**	SeqNo:	**177646**	Units:	**mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.10								
Cobalt	ND	0.30								

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS-4190** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4190** RunNo: **6163**
Prep Date: **10/9/2012** Analysis Date: **10/11/2012** SeqNo: **177647** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	26	0.10	25.00	0.06900	103	80	120			
Cobalt	26	0.30	25.00	0	103	80	120			

Sample ID **1210332-009CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-5 (27-28')** Batch ID: **4190** RunNo: **6163**
Prep Date: **10/9/2012** Analysis Date: **10/11/2012** SeqNo: **177670** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	25	0.75	24.45	1.059	97.2	75	125			
Cadmium	23	0.50	24.45	0	92.3	75	125			
Chromium	37	1.5	24.45	14.78	89.3	75	125			
Cobalt	29	1.5	24.45	7.765	86.7	75	125			
Lead	21	1.2	24.45	0	84.0	75	125			
Nickel	33	2.5	24.45	12.30	86.5	75	125			
Selenium	ND	12	24.45	0	0	75	125			S
Silver	4.5	1.2	4.889	0	92.6	75	125			
Vanadium	47	12	24.45	21.78	101	75	125			
Zinc	55	12	24.45	31.31	95.7	75	125			

Sample ID **1210332-009CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-5 (27-28')** Batch ID: **4190** RunNo: **6163**
Prep Date: **10/9/2012** Analysis Date: **10/11/2012** SeqNo: **177671** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	23	0.75	24.24	1.059	89.2	75	125	9.01	20	
Cadmium	21	0.50	24.24	0	85.2	75	125	8.90	20	
Chromium	35	1.5	24.24	14.78	81.6	75	125	5.77	20	
Cobalt	26	1.5	24.24	7.765	77.2	75	125	8.96	20	
Lead	20	1.2	24.24	0	82.6	75	125	2.50	20	
Nickel	31	2.5	24.24	12.30	76.9	75	125	7.78	20	
Selenium	ND	12	24.24	0	0	75	125	0	20	S
Silver	4.3	1.2	4.848	0	88.3	75	125	5.66	20	
Vanadium	44	12	24.24	21.78	91.5	75	125	5.71	20	
Zinc	50	12	24.24	31.31	76.7	75	125	9.19	20	

Sample ID **1210332-009CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-5 (27-28')** Batch ID: **4190** RunNo: **6192**
Prep Date: **10/9/2012** Analysis Date: **10/11/2012** SeqNo: **178373** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.45	0	0	75	125			S
Arsenic	23	12	24.45	0	94.4	75	125			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210332**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210332-009CMSD**	SampType:	**MSD**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**SWMU 1-5 (27-28')**	Batch ID:	**4190**	RunNo:	**6192**
Prep Date:	**10/9/2012**	Analysis Date:	**10/11/2012**	SeqNo:	**178374** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.24	0	0	75	125	0	20	S
Arsenic	24	12	24.24	0	100	75	125	5.14	20	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210332

Received by/date: 10/05/12

Logged By: **Lindsay Mangin** 10/5/2012 6:45:00 AM

Completed By: **Lindsay Mangin** 10/5/2012 7:28:35 AM

Reviewed By: ZO 10/05/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? ~~Yes ☑ No~~ ☐
10. Was preservative added to bottles? Yes ☑ ~~No ☑~~ NA ☐
    -005E-ADDED 1mL HNO_3 FOR ACCEPTABLE pH - 10/05/12
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 2 3 (<2 or >12 unless noted)
Adjusted? Y
Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.8

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210332	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/3/12	1315	SOIL	SWMU 1-4 (10-12') DUP	2 VIALS	SOBI	-001										X						
				2 VIALS	MEOH											X						
				1 JAR	—											X	X	X	X			
	1345	SOIL	SWMU 1-4 (17-18')	2 VIALS	SOBI	-002										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1400	SOIL	SWMU 1-4 (23-24')	2 VIALS	SOBI	-003										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
10/3/12	—	WATER	TRIP BLANK	3 VOAS	HCL	-004										X						

Date	Time	Relinquished by:	Received by:	Date	Time
10/4/12	0717	[signature]	[signature]	10/05/12	0645
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY

Mailing Address: ROUTE 3 BOX 7 GALLUP NM 87301

Phone #: 505-722-0217

email or Fax#: SCOTT CROUCH-RPS

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

Accreditation: ☐ NELAP ☐ Other ____

☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____

Project Name: SWMU No. 1

Project #:

Project Manager: SCOTT CROUCH-RPS

Sampler: TRACY PAYNE-RPS

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210332	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/3/12	0930	GW	SWMU 1-3 GW	6 VOA	HCL/NEAT	-005										X						
				1 AMBER	—												X					
				PLASTIC	—														X			
				PLASTIC	HNO_3														X			
				PLASTIC	NaOH														X			
	1300	SOIL	SWMU 1-4 (8-10')	2 VIALS	5OBI	-006										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1315	SOIL	SWMU 1-4 (10-12')	2 VIALS	5OBI	-007										X						
				2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/4/12	0717	[signature]	[signature]	10/05/12	0645
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No.1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.8

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210332	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/3/12	1820	SOIL	SWMU 1-5(26-27')	2 VIALS	SOBI	-008										X						
				2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			
	1830		SWMU 1-5(27-28')	2 VIALS	SOBI	-009										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
10/3/12	1844	WATER	EB100312	6 VOA	HCL/NEAT	-010										X						
				1 AMBER	—												X					
				1 PLASTIC	—														X			
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
10/3/12	—	—	MEOH BLANK 100312	2 VIALS	MEOH	-011										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/4/12	0709	[signature]	[signature]	10/05/12	0645
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Chain-of-Custody Record

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GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.8

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210332	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/3/12	1730	SOIL	SWMU 1-5(10-12')	2 VIALS	SOBI	-012										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1745		SWMU 1-5(14-16')	2 VIALS	SOBI	-013										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1800		SWMU 1-5(16-18')	2 VIALS	SOBI	-014										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1810		SWMU 1-5(24-25')	2 VIALS	SOBI	-015										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/4/12	0709	[illegible]	[illegible]	10/05/12	0645
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

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

November 14, 2012

Scott Crouch
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210372

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 28 sample(s) on 10/6/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued October 29, 2012.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (2-4')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:10:00 PM
Lab ID: 1210372-001
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	4700	1000		mg/Kg	100	10/9/2012 12:21:25 PM
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	10/9/2012 12:21:25 PM
Surr: DNOP	0	77.6-140	S	%REC	100	10/9/2012 12:21:25 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	410	250		mg/Kg	50	10/10/2012 4:13:23 PM
Surr: BFB	159	84-116	S	%REC	50	10/10/2012 4:13:23 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	1.4	0.33		mg/kg	10	10/11/2012 3:46:24 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 2:29:04 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 2:29:04 PM
Barium	450	1.0		mg/Kg	10	10/11/2012 3:14:12 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 2:29:04 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 2:29:04 PM
Chromium	400	3.0		mg/Kg	10	10/11/2012 3:14:12 PM
Cobalt	8.1	1.5		mg/Kg	5	10/11/2012 2:29:04 PM
Iron	16000	500		mg/Kg	500	10/11/2012 3:19:11 PM
Lead	80	1.2		mg/Kg	5	10/11/2012 2:29:04 PM
Manganese	480	1.0		mg/Kg	10	10/11/2012 3:14:12 PM
Nickel	15	2.5		mg/Kg	5	10/11/2012 2:29:04 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 2:29:04 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 2:29:04 PM
Vanadium	20	12		mg/Kg	5	10/11/2012 2:29:04 PM
Zinc	720	120		mg/Kg	50	10/11/2012 3:16:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Aniline	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Anthracene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Azobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (2-4')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:10:00 PM
Lab ID: 1210372-001
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Carbazole	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/10/2012 2:41:03 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Chrysene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	10/10/2012 2:41:03 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/10/2012 2:41:03 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/10/2012 2:41:03 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/10/2012 2:41:03 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/10/2012 2:41:03 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Fluorene	3.7	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Isophorone	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
1-Methylnaphthalene	43	10		mg/Kg	10	10/10/2012 3:12:23 PM
2-Methylnaphthalene	55	10		mg/Kg	10	10/10/2012 3:12:23 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Naphthalene	7.9	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (2-4')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:10:00 PM
Lab ID: 1210372-001
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/10/2012 2:41:03 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/10/2012 2:41:03 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/10/2012 2:41:03 PM
Phenanthrene	11	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Phenol	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Pyrene	1.5	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Pyridine	ND	2.5		mg/Kg	1	10/10/2012 2:41:03 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/10/2012 2:41:03 PM
Surr: 2,4,6-Tribromophenol	39.2	21.3-145		%REC	1	10/10/2012 2:41:03 PM
Surr: 2-Fluorobiphenyl	65.5	20-131		%REC	1	10/10/2012 2:41:03 PM
Surr: 2-Fluorophenol	76.1	11.9-130		%REC	1	10/10/2012 2:41:03 PM
Surr: 4-Terphenyl-d14	80.1	25.1-149		%REC	1	10/10/2012 2:41:03 PM
Surr: Nitrobenzene-d5	0	25.6-137	S	%REC	1	10/10/2012 2:41:03 PM
Surr: Phenol-d5	74.1	20.3-132		%REC	1	10/10/2012 2:41:03 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	3.2	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Toluene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Ethylbenzene	5.8	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,2,4-Trimethylbenzene	17	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,3,5-Trimethylbenzene	5.8	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Naphthalene	13	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
1-Methylnaphthalene	35	10		mg/Kg	50	10/15/2012 11:08:23 PM
2-Methylnaphthalene	48	10		mg/Kg	50	10/15/2012 11:08:23 PM
Acetone	ND	38		mg/Kg	50	10/15/2012 11:08:23 PM
Bromobenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Bromodichloromethane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Bromoform	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Bromomethane	ND	7.5		mg/Kg	50	10/15/2012 11:08:23 PM
2-Butanone	ND	25		mg/Kg	50	10/15/2012 11:08:23 PM
Carbon disulfide	ND	25		mg/Kg	50	10/15/2012 11:08:23 PM
Carbon tetrachloride	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
Chlorobenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Chloroethane	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (2-4')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:10:00 PM
Lab ID: 1210372-001
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Chloroform	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Chloromethane	ND	7.5		mg/Kg	50	10/15/2012 11:08:23 PM
2-Chlorotoluene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
4-Chlorotoluene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
cis-1,2-DCE	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
Dibromochloromethane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Dibromomethane	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
2-Hexanone	ND	25		mg/Kg	50	10/15/2012 11:08:23 PM
Isopropylbenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	10/15/2012 11:08:23 PM
Methylene chloride	ND	7.5		mg/Kg	50	10/15/2012 11:08:23 PM
n-Butylbenzene	ND	7.5		mg/Kg	50	10/15/2012 11:08:23 PM
n-Propylbenzene	2.8	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
sec-Butylbenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Styrene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
tert-Butylbenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
trans-1,2-DCE	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	10/15/2012 11:08:23 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (2-4')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:10:00 PM
Lab ID: 1210372-001
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Vinyl chloride	ND	2.5		mg/Kg	50	10/15/2012 11:08:23 PM
Xylenes, Total	24	5.0		mg/Kg	50	10/15/2012 11:08:23 PM
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%REC	50	10/15/2012 11:08:23 PM
Surr: 4-Bromofluorobenzene	80.1	70-130		%REC	50	10/15/2012 11:08:23 PM
Surr: Dibromofluoromethane	91.8	70-130		%REC	50	10/15/2012 11:08:23 PM
Surr: Toluene-d8	98.8	70-130		%REC	50	10/15/2012 11:08:23 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:15:00 PM
Lab ID: 1210372-002
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	820	100		mg/Kg	10	10/9/2012 11:59:39 AM
Motor Oil Range Organics (MRO)	ND	510		mg/Kg	10	10/9/2012 11:59:39 AM
Surr: DNOP	0	77.6-140	S	%REC	10	10/9/2012 11:59:39 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	10/10/2012 5:10:59 PM
Surr: BFB	124	84-116	S	%REC	5	10/10/2012 5:10:59 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:19:49 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 2:47:13 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 2:47:13 PM
Barium	300	1.0		mg/Kg	10	10/11/2012 3:21:49 PM
Beryllium	1.2	0.75		mg/Kg	5	10/11/2012 2:47:13 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 2:47:13 PM
Chromium	16	1.5		mg/Kg	5	10/11/2012 2:47:13 PM
Cobalt	7.5	1.5		mg/Kg	5	10/11/2012 2:47:13 PM
Iron	23000	500		mg/Kg	500	10/11/2012 3:29:57 PM
Lead	3.3	1.2		mg/Kg	5	10/11/2012 2:47:13 PM
Manganese	290	1.0		mg/Kg	10	10/11/2012 3:21:49 PM
Nickel	15	2.5		mg/Kg	5	10/11/2012 2:47:13 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 2:47:13 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 2:47:13 PM
Vanadium	25	12		mg/Kg	5	10/11/2012 2:47:13 PM
Zinc	29	12		mg/Kg	5	10/11/2012 2:47:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:15:00 PM
Lab ID: 1210372-002
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 3:05:05 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 3:05:05 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 3:05:05 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 3:05:05 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 3:05:05 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 3:05:05 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Fluorene	0.68	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
1-Methylnaphthalene	7.9	2.0		mg/Kg	10	10/10/2012 1:10:56 PM
2-Methylnaphthalene	14	2.0		mg/Kg	10	10/10/2012 1:10:56 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Naphthalene	1.1	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:15:00 PM
Lab ID: 1210372-002
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 3:05:05 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 3:05:05 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 3:05:05 AM
Phenanthrene	1.5	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 3:05:05 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 3:05:05 AM
Surr: 2,4,6-Tribromophenol	66.8	21.3-145		%REC	1	10/10/2012 3:05:05 AM
Surr: 2-Fluorobiphenyl	80.4	20-131		%REC	1	10/10/2012 3:05:05 AM
Surr: 2-Fluorophenol	92.8	11.9-130		%REC	1	10/10/2012 3:05:05 AM
Surr: 4-Terphenyl-d14	79.4	25.1-149		%REC	1	10/10/2012 3:05:05 AM
Surr: Nitrobenzene-d5	94.3	25.6-137		%REC	1	10/10/2012 3:05:05 AM
Surr: Phenol-d5	97.2	20.3-132		%REC	1	10/10/2012 3:05:05 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Toluene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Ethylbenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,2,4-Trimethylbenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Naphthalene	1.3	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
1-Methylnaphthalene	6.4	2.0		mg/Kg	10	10/15/2012 11:36:31 PM
2-Methylnaphthalene	13	2.0		mg/Kg	10	10/15/2012 11:36:31 PM
Acetone	ND	7.5		mg/Kg	10	10/15/2012 11:36:31 PM
Bromobenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Bromoform	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Bromomethane	ND	1.5		mg/Kg	10	10/15/2012 11:36:31 PM
2-Butanone	ND	5.0		mg/Kg	10	10/15/2012 11:36:31 PM
Carbon disulfide	ND	5.0		mg/Kg	10	10/15/2012 11:36:31 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
Chlorobenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Chloroethane	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:15:00 PM
Lab ID: 1210372-002
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Chloroform	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Chloromethane	ND	1.5		mg/Kg	10	10/15/2012 11:36:31 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Dibromomethane	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
2-Hexanone	ND	5.0		mg/Kg	10	10/15/2012 11:36:31 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/15/2012 11:36:31 PM
Methylene chloride	ND	1.5		mg/Kg	10	10/15/2012 11:36:31 PM
n-Butylbenzene	ND	1.5		mg/Kg	10	10/15/2012 11:36:31 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Styrene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:15:00 PM
Lab ID: 1210372-002
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Vinyl chloride	ND	0.50		mg/Kg	10	10/15/2012 11:36:31 PM
Xylenes, Total	ND	1.0		mg/Kg	10	10/15/2012 11:36:31 PM
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%REC	10	10/15/2012 11:36:31 PM
Surr: 4-Bromofluorobenzene	90.2	70-130		%REC	10	10/15/2012 11:36:31 PM
Surr: Dibromofluoromethane	91.4	70-130		%REC	10	10/15/2012 11:36:31 PM
Surr: Toluene-d8	95.0	70-130		%REC	10	10/15/2012 11:36:31 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (13-14')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:30:00 PM
Lab ID: 1210372-003
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	55	10		mg/Kg	1	10/9/2012 9:16:28 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/9/2012 9:16:28 AM
Surr: DNOP	99.7	77.6-140		%REC	1	10/9/2012 9:16:28 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/10/2012 6:08:27 PM
Surr: BFB	113	84-116		%REC	1	10/10/2012 6:08:27 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:21:36 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	25		mg/Kg	10	10/11/2012 3:32:36 PM
Arsenic	ND	25		mg/Kg	10	10/11/2012 3:32:36 PM
Barium	630	5.0		mg/Kg	50	10/11/2012 3:39:36 PM
Beryllium	ND	1.5		mg/Kg	10	10/11/2012 3:32:36 PM
Cadmium	ND	1.0		mg/Kg	10	10/11/2012 3:32:36 PM
Chromium	6.8	3.0		mg/Kg	10	10/11/2012 3:32:36 PM
Cobalt	8.0	3.0		mg/Kg	10	10/11/2012 3:32:36 PM
Iron	8100	500		mg/Kg	500	10/11/2012 3:41:59 PM
Lead	ND	2.5		mg/Kg	10	10/11/2012 3:32:36 PM
Manganese	2800	50		mg/Kg	500	10/11/2012 3:41:59 PM
Nickel	8.3	5.0		mg/Kg	10	10/11/2012 3:32:36 PM
Selenium	ND	25		mg/Kg	10	10/11/2012 3:32:36 PM
Silver	ND	2.5		mg/Kg	10	10/11/2012 3:32:36 PM
Vanadium	30	25		mg/Kg	10	10/11/2012 3:32:36 PM
Zinc	ND	25		mg/Kg	10	10/11/2012 3:32:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (13-14')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:30:00 PM
Lab ID: 1210372-003
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 3:34:07 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 3:34:07 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 3:34:07 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 3:34:07 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 3:34:07 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 3:34:07 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (13-14')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:30:00 PM
Lab ID: 1210372-003
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 3:34:07 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 3:34:07 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 3:34:07 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 3:34:07 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 3:34:07 AM
Surr: 2,4,6-Tribromophenol	82.4	21.3-145		%REC	1	10/10/2012 3:34:07 AM
Surr: 2-Fluorobiphenyl	81.7	20-131		%REC	1	10/10/2012 3:34:07 AM
Surr: 2-Fluorophenol	79.4	11.9-130		%REC	1	10/10/2012 3:34:07 AM
Surr: 4-Terphenyl-d14	77.5	25.1-149		%REC	1	10/10/2012 3:34:07 AM
Surr: Nitrobenzene-d5	83.4	25.6-137		%REC	1	10/10/2012 3:34:07 AM
Surr: Phenol-d5	87.9	20.3-132		%REC	1	10/10/2012 3:34:07 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Toluene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Ethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Naphthalene	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/16/2012 12:32:33 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/16/2012 12:32:33 AM
Acetone	ND	0.75		mg/Kg	1	10/16/2012 12:32:33 AM
Bromobenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Bromoform	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Bromomethane	ND	0.15		mg/Kg	1	10/16/2012 12:32:33 AM
2-Butanone	ND	0.50		mg/Kg	1	10/16/2012 12:32:33 AM
Carbon disulfide	ND	0.50		mg/Kg	1	10/16/2012 12:32:33 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
Chlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Chloroethane	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (13-14')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:30:00 PM
Lab ID: 1210372-003
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Chloroform	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Chloromethane	ND	0.15		mg/Kg	1	10/16/2012 12:32:33 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Dibromomethane	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
2-Hexanone	ND	0.50		mg/Kg	1	10/16/2012 12:32:33 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/16/2012 12:32:33 AM
Methylene chloride	ND	0.15		mg/Kg	1	10/16/2012 12:32:33 AM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/16/2012 12:32:33 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Styrene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-1 (13-14')
Project: SWMU NO.1
Collection Date: 10/5/2012 2:30:00 PM
Lab ID: 1210372-003
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Vinyl chloride	ND	0.050		mg/Kg	1	10/16/2012 12:32:33 AM
Xylenes, Total	ND	0.10		mg/Kg	1	10/16/2012 12:32:33 AM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	10/16/2012 12:32:33 AM
Surr: 4-Bromofluorobenzene	81.8	70-130		%REC	1	10/16/2012 12:32:33 AM
Surr: Dibromofluoromethane	92.1	70-130		%REC	1	10/16/2012 12:32:33 AM
Surr: Toluene-d8	99.7	70-130		%REC	1	10/16/2012 12:32:33 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18') DUP
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-004
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/9/2012 9:38:07 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/9/2012 9:38:07 AM
Surr: DNOP	91.2	77.6-140		%REC	1	10/9/2012 9:38:07 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/8/2012 8:34:40 PM
Surr: BFB	103	84-116		%REC	1	10/8/2012 8:34:40 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:23:22 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 3:44:52 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 3:44:52 PM
Barium	530	5.0		mg/Kg	50	10/11/2012 3:47:18 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 3:44:52 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 3:44:52 PM
Chromium	6.6	1.5		mg/Kg	5	10/11/2012 3:44:52 PM
Cobalt	3.5	1.5		mg/Kg	5	10/11/2012 3:44:52 PM
Iron	9100	500		mg/Kg	500	10/11/2012 3:49:43 PM
Lead	2.5	1.2		mg/Kg	5	10/11/2012 3:44:52 PM
Manganese	660	5.0		mg/Kg	50	10/11/2012 3:47:18 PM
Nickel	4.4	2.5		mg/Kg	5	10/11/2012 3:44:52 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 3:44:52 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 3:44:52 PM
Vanadium	23	12		mg/Kg	5	10/11/2012 3:44:52 PM
Zinc	ND	12		mg/Kg	5	10/11/2012 3:44:52 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18') DUP
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-004
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 4:03:08 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 4:03:08 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 4:03:08 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 4:03:08 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 4:03:08 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 4:03:08 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18') DUP
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-004
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 4:03:08 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 4:03:08 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 4:03:08 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 4:03:08 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 4:03:08 AM
Surr: 2,4,6-Tribromophenol	70.7	21.3-145		%REC	1	10/10/2012 4:03:08 AM
Surr: 2-Fluorobiphenyl	74.1	20-131		%REC	1	10/10/2012 4:03:08 AM
Surr: 2-Fluorophenol	74.7	11.9-130		%REC	1	10/10/2012 4:03:08 AM
Surr: 4-Terphenyl-d14	66.8	25.1-149		%REC	1	10/10/2012 4:03:08 AM
Surr: Nitrobenzene-d5	74.1	25.6-137		%REC	1	10/10/2012 4:03:08 AM
Surr: Phenol-d5	80.3	20.3-132		%REC	1	10/10/2012 4:03:08 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00148	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Toluene	0.00121	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Ethylbenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Xylenes, Total	ND	0.00212		mg/Kg	1	10/9/2012 10:42:46 PM
Methyl tert-butyl ether (MTBE)	0.0240	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,2,4-Trimethylbenzene	0.00109	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,3,5-Trimethylbenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,2-Dichloroethane (EDC)	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,2-Dibromoethane (EDB)	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Naphthalene	ND	0.00212		mg/Kg	1	10/9/2012 10:42:46 PM
1-Methylnaphthalene	ND	0.00424		mg/Kg	1	10/9/2012 10:42:46 PM
2-Methylnaphthalene	ND	0.00424		mg/Kg	1	10/9/2012 10:42:46 PM
Acetone	0.0370	0.0106		mg/Kg	1	10/9/2012 10:42:46 PM
Bromobenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Bromodichloromethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Bromoform	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Bromomethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
2-Butanone	ND	0.0106		mg/Kg	1	10/9/2012 10:42:46 PM
Carbon tetrachloride	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Chlorobenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Chloroethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18') DUP
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-004
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Chloromethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
2-Chlorotoluene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Carbon disulfide	ND	0.0106		mg/Kg	1	10/9/2012 10:42:46 PM
4-Chlorotoluene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
cis-1,2-DCE	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
cis-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,2-Dibromo-3-chloropropane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Dibromochloromethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Dibromomethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,2-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,3-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,4-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Dichlorodifluoromethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,1-Dichloroethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,1-Dichloroethene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,3-Dichloropropane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
2,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,1-Dichloropropene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Hexachlorobutadiene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Isopropylbenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
4-Isopropyltoluene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Methylene chloride	ND	0.00318		mg/Kg	1	10/9/2012 10:42:46 PM
n-Butylbenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
2-Hexanone	ND	0.0106		mg/Kg	1	10/9/2012 10:42:46 PM
n-Propylbenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
sec-Butylbenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Styrene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
4-Methyl-2-pentanone	ND	0.0106		mg/Kg	1	10/9/2012 10:42:46 PM
tert-Butylbenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,1,1,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,1,2,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Tetrachloroethene (PCE)	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
trans-1,2-DCE	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
trans-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,2,3-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,2,4-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,1,1-Trichloroethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
1,1,2-Trichloroethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Trichloroethene (TCE)	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Trichlorofluoromethane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18') DUP
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-004
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Vinyl chloride	ND	0.00106		mg/Kg	1	10/9/2012 10:42:46 PM
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%REC	1	10/9/2012 10:42:46 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	1	10/9/2012 10:42:46 PM
Surr: Dibromofluoromethane	108	70-130		%REC	1	10/9/2012 10:42:46 PM
Surr: Toluene-d8	95.8	70-130		%REC	1	10/9/2012 10:42:46 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (19-20')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:25:00 AM
Lab ID: 1210372-005
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/9/2012 9:59:40 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 9:59:40 AM
Surr: DNOP	95.4	77.6-140		%REC	1	10/9/2012 9:59:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/8/2012 11:27:22 PM
Surr: BFB	100	84-116		%REC	1	10/8/2012 11:27:22 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:25:08 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 3:52:34 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 3:52:34 PM
Barium	300	5.0		mg/Kg	50	10/11/2012 3:55:01 PM
Beryllium	0.95	0.75		mg/Kg	5	10/11/2012 3:52:34 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 3:52:34 PM
Chromium	14	1.5		mg/Kg	5	10/11/2012 3:52:34 PM
Cobalt	8.2	1.5		mg/Kg	5	10/11/2012 3:52:34 PM
Iron	19000	500		mg/Kg	500	10/11/2012 3:57:26 PM
Lead	ND	1.2		mg/Kg	5	10/11/2012 3:52:34 PM
Manganese	300	5.0		mg/Kg	50	10/11/2012 3:55:01 PM
Nickel	12	2.5		mg/Kg	5	10/11/2012 3:52:34 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 3:52:34 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 3:52:34 PM
Vanadium	26	12		mg/Kg	5	10/11/2012 3:52:34 PM
Zinc	29	12		mg/Kg	5	10/11/2012 3:52:34 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (19-20')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:25:00 AM
Lab ID: 1210372-005
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 4:32:12 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 4:32:12 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 4:32:12 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 4:32:12 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 4:32:12 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 4:32:12 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (19-20')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:25:00 AM
Lab ID: 1210372-005
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 4:32:12 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 4:32:12 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 4:32:12 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 4:32:12 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 4:32:12 AM
Surr: 2,4,6-Tribromophenol	62.5	21.3-145		%REC	1	10/10/2012 4:32:12 AM
Surr: 2-Fluorobiphenyl	55.9	20-131		%REC	1	10/10/2012 4:32:12 AM
Surr: 2-Fluorophenol	55.9	11.9-130		%REC	1	10/10/2012 4:32:12 AM
Surr: 4-Terphenyl-d14	54.9	25.1-149		%REC	1	10/10/2012 4:32:12 AM
Surr: Nitrobenzene-d5	56.1	25.6-137		%REC	1	10/10/2012 4:32:12 AM
Surr: Phenol-d5	60.2	20.3-132		%REC	1	10/10/2012 4:32:12 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Toluene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Ethylbenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Xylenes, Total	ND	0.00218		mg/Kg	1	10/9/2012 8:39:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,2,4-Trimethylbenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,3,5-Trimethylbenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,2-Dichloroethane (EDC)	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,2-Dibromoethane (EDB)	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Naphthalene	ND	0.00218		mg/Kg	1	10/9/2012 8:39:34 PM
1-Methylnaphthalene	ND	0.00435		mg/Kg	1	10/9/2012 8:39:34 PM
2-Methylnaphthalene	ND	0.00435		mg/Kg	1	10/9/2012 8:39:34 PM
Acetone	0.0272	0.0109		mg/Kg	1	10/9/2012 8:39:34 PM
Bromobenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Bromodichloromethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Bromoform	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Bromomethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
2-Butanone	ND	0.0109		mg/Kg	1	10/9/2012 8:39:34 PM
Carbon tetrachloride	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Chlorobenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Chloroethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (19-20')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:25:00 AM
Lab ID: 1210372-005
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Chloromethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
2-Chlorotoluene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Carbon disulfide	ND	0.0109		mg/Kg	1	10/9/2012 8:39:34 PM
4-Chlorotoluene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
cis-1,2-DCE	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
cis-1,3-Dichloropropene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,2-Dibromo-3-chloropropane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Dibromochloromethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Dibromomethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,2-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,3-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,4-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Dichlorodifluoromethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,1-Dichloroethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,1-Dichloroethene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,2-Dichloropropane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,3-Dichloropropane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
2,2-Dichloropropane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,1-Dichloropropene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Hexachlorobutadiene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Isopropylbenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
4-Isopropyltoluene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Methylene chloride	ND	0.00326		mg/Kg	1	10/9/2012 8:39:34 PM
n-Butylbenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
2-Hexanone	ND	0.0109		mg/Kg	1	10/9/2012 8:39:34 PM
n-Propylbenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
sec-Butylbenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Styrene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
4-Methyl-2-pentanone	ND	0.0109		mg/Kg	1	10/9/2012 8:39:34 PM
tert-Butylbenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,1,1,2-Tetrachloroethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,1,2,2-Tetrachloroethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Tetrachloroethene (PCE)	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
trans-1,2-DCE	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
trans-1,3-Dichloropropene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,2,3-Trichlorobenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,2,4-Trichlorobenzene	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,1,1-Trichloroethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
1,1,2-Trichloroethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Trichloroethene (TCE)	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Trichlorofluoromethane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (19-20')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:25:00 AM
Lab ID: 1210372-005
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Vinyl chloride	ND	0.00109		mg/Kg	1	10/9/2012 8:39:34 PM
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	10/9/2012 8:39:34 PM
Surr: 4-Bromofluorobenzene	115	70-130		%REC	1	10/9/2012 8:39:34 PM
Surr: Dibromofluoromethane	99.5	70-130		%REC	1	10/9/2012 8:39:34 PM
Surr: Toluene-d8	88.4	70-130		%REC	1	10/9/2012 8:39:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (4-6')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:20:00 AM
Lab ID: 1210372-006
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/9/2012 10:32:04 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/9/2012 10:32:04 AM
Surr: DNOP	103	77.6-140		%REC	1	10/9/2012 10:32:04 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/10/2012 6:37:17 PM
Surr: BFB	108	84-116		%REC	1	10/10/2012 6:37:17 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:26:55 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 4:05:56 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 4:05:56 PM
Barium	540	5.0		mg/Kg	50	10/11/2012 4:10:00 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 4:05:56 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 4:05:56 PM
Chromium	5.3	1.5		mg/Kg	5	10/11/2012 4:05:56 PM
Cobalt	3.0	1.5		mg/Kg	5	10/11/2012 4:05:56 PM
Iron	7900	500		mg/Kg	500	10/11/2012 4:15:16 PM
Lead	3.4	1.2		mg/Kg	5	10/11/2012 4:05:56 PM
Manganese	390	5.0		mg/Kg	50	10/11/2012 4:10:00 PM
Nickel	4.5	2.5		mg/Kg	5	10/11/2012 4:05:56 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 4:05:56 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 4:05:56 PM
Vanadium	19	12		mg/Kg	5	10/11/2012 4:05:56 PM
Zinc	ND	12		mg/Kg	5	10/11/2012 4:05:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (4-6')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:20:00 AM
Lab ID: 1210372-006
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 5:01:17 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 5:01:17 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 5:01:17 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 5:01:17 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 5:01:17 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 5:01:17 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (4-6')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:20:00 AM
Lab ID: 1210372-006
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 5:01:17 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 5:01:17 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 5:01:17 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 5:01:17 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:01:17 AM
Surr: 2,4,6-Tribromophenol	97.6	21.3-145		%REC	1	10/10/2012 5:01:17 AM
Surr: 2-Fluorobiphenyl	91.8	20-131		%REC	1	10/10/2012 5:01:17 AM
Surr: 2-Fluorophenol	87.8	11.9-130		%REC	1	10/10/2012 5:01:17 AM
Surr: 4-Terphenyl-d14	79.3	25.1-149		%REC	1	10/10/2012 5:01:17 AM
Surr: Nitrobenzene-d5	93.8	25.6-137		%REC	1	10/10/2012 5:01:17 AM
Surr: Phenol-d5	94.4	20.3-132		%REC	1	10/10/2012 5:01:17 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00240	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Toluene	0.00218	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Ethylbenzene	0.00249	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Xylenes, Total	0.0128	0.00162		mg/Kg	1	10/9/2012 9:10:16 PM
Methyl tert-butyl ether (MTBE)	0.00810	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,2,4-Trimethylbenzene	0.0102	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,3,5-Trimethylbenzene	0.00249	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,2-Dichloroethane (EDC)	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,2-Dibromoethane (EDB)	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Naphthalene	0.0113	0.00162		mg/Kg	1	10/9/2012 9:10:16 PM
1-Methylnaphthalene	0.0164	0.00325		mg/Kg	1	10/9/2012 9:10:16 PM
2-Methylnaphthalene	0.0168	0.00325		mg/Kg	1	10/9/2012 9:10:16 PM
Acetone	0.114	0.00812		mg/Kg	1	10/9/2012 9:10:16 PM
Bromobenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Bromodichloromethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Bromoform	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Bromomethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
2-Butanone	0.0177	0.00812		mg/Kg	1	10/9/2012 9:10:16 PM
Carbon tetrachloride	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Chlorobenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Chloroethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (4-6')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:20:00 AM
Lab ID: 1210372-006
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Chloromethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
2-Chlorotoluene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Carbon disulfide	ND	0.00812		mg/Kg	1	10/9/2012 9:10:16 PM
4-Chlorotoluene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
cis-1,2-DCE	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
cis-1,3-Dichloropropene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,2-Dibromo-3-chloropropane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Dibromochloromethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Dibromomethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,2-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,3-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,4-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Dichlorodifluoromethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,1-Dichloroethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,1-Dichloroethene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,2-Dichloropropane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,3-Dichloropropane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
2,2-Dichloropropane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,1-Dichloropropene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Hexachlorobutadiene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Isopropylbenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
4-Isopropyltoluene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Methylene chloride	ND	0.00244		mg/Kg	1	10/9/2012 9:10:16 PM
n-Butylbenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
2-Hexanone	ND	0.00812		mg/Kg	1	10/9/2012 9:10:16 PM
n-Propylbenzene	0.00136	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
sec-Butylbenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Styrene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
4-Methyl-2-pentanone	ND	0.00812		mg/Kg	1	10/9/2012 9:10:16 PM
tert-Butylbenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,1,1,2-Tetrachloroethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,1,2,2-Tetrachloroethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Tetrachloroethene (PCE)	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
trans-1,2-DCE	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
trans-1,3-Dichloropropene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,2,3-Trichlorobenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,2,4-Trichlorobenzene	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,1,1-Trichloroethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
1,1,2-Trichloroethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Trichloroethene (TCE)	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Trichlorofluoromethane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (4-6')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:20:00 AM
Lab ID: 1210372-006
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Vinyl chloride	ND	0.000812		mg/Kg	1	10/9/2012 9:10:16 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	10/9/2012 9:10:16 PM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	1	10/9/2012 9:10:16 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/9/2012 9:10:16 PM
Surr: Toluene-d8	89.2	70-130		%REC	1	10/9/2012 9:10:16 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:30:00 AM
Lab ID: 1210372-007
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	100	10		mg/Kg	1	10/9/2012 1:49:44 PM
Motor Oil Range Organics (MRO)	280	51		mg/Kg	1	10/9/2012 1:49:44 PM
Surr: DNOP	122	77.6-140		%REC	1	10/9/2012 1:49:44 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 12:24:53 AM
Surr: BFB	103	84-116		%REC	1	10/9/2012 12:24:53 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.16	0.033		mg/kg	1	10/11/2012 3:28:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 4:18:09 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 4:18:09 PM
Barium	620	5.0		mg/Kg	50	10/11/2012 4:20:33 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 4:18:09 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 4:18:09 PM
Chromium	21	1.5		mg/Kg	5	10/11/2012 4:18:09 PM
Cobalt	6.6	1.5		mg/Kg	5	10/11/2012 4:18:09 PM
Iron	15000	500		mg/Kg	500	10/11/2012 4:22:59 PM
Lead	8.2	1.2		mg/Kg	5	10/11/2012 4:18:09 PM
Manganese	810	5.0		mg/Kg	50	10/11/2012 4:20:33 PM
Nickel	16	2.5		mg/Kg	5	10/11/2012 4:18:09 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 4:18:09 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 4:18:09 PM
Vanadium	26	12		mg/Kg	5	10/11/2012 4:18:09 PM
Zinc	60	12		mg/Kg	5	10/11/2012 4:18:09 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Aniline	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Anthracene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Azobenzene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:30:00 AM
Lab ID: 1210372-007
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Carbazole	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/10/2012 1:40:56 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Chrysene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	10/10/2012 1:40:56 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/10/2012 1:40:56 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/10/2012 1:40:56 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/10/2012 1:40:56 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/10/2012 1:40:56 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Fluorene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Isophorone	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Naphthalene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:30:00 AM
Lab ID: 1210372-007
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/10/2012 1:40:56 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/10/2012 1:40:56 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/10/2012 1:40:56 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Phenol	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Pyrene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Pyridine	ND	2.5		mg/Kg	1	10/10/2012 1:40:56 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/10/2012 1:40:56 PM
Surr: 2,4,6-Tribromophenol	120	21.3-145		%REC	1	10/10/2012 1:40:56 PM
Surr: 2-Fluorobiphenyl	102	20-131		%REC	1	10/10/2012 1:40:56 PM
Surr: 2-Fluorophenol	112	11.9-130		%REC	1	10/10/2012 1:40:56 PM
Surr: 4-Terphenyl-d14	103	25.1-149		%REC	1	10/10/2012 1:40:56 PM
Surr: Nitrobenzene-d5	103	25.6-137		%REC	1	10/10/2012 1:40:56 PM
Surr: Phenol-d5	107	20.3-132		%REC	1	10/10/2012 1:40:56 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00119	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Toluene	0.00426	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Ethylbenzene	0.00470	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Xylenes, Total	0.0262	0.00186		mg/Kg	1	10/9/2012 9:41:06 PM
Methyl tert-butyl ether (MTBE)	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,2,4-Trimethylbenzene	0.00358	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,3,5-Trimethylbenzene	0.000978	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,2-Dichloroethane (EDC)	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,2-Dibromoethane (EDB)	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Naphthalene	ND	0.00186		mg/Kg	1	10/9/2012 9:41:06 PM
1-Methylnaphthalene	ND	0.00372		mg/Kg	1	10/9/2012 9:41:06 PM
2-Methylnaphthalene	ND	0.00372		mg/Kg	1	10/9/2012 9:41:06 PM
Acetone	0.145	0.00931		mg/Kg	1	10/9/2012 9:41:06 PM
Bromobenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Bromodichloromethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Bromoform	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Bromomethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
2-Butanone	ND	0.00931		mg/Kg	1	10/9/2012 9:41:06 PM
Carbon tetrachloride	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Chlorobenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Chloroethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM

Qualifiers:

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Matrix: SOIL
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Chloromethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
2-Chlorotoluene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Carbon disulfide	ND	0.00931		mg/Kg	1	10/9/2012 9:41:06 PM
4-Chlorotoluene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
cis-1,2-DCE	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
cis-1,3-Dichloropropene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,2-Dibromo-3-chloropropane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Dibromochloromethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Dibromomethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,2-Dichlorobenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,3-Dichlorobenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,4-Dichlorobenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Dichlorodifluoromethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,1-Dichloroethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,1-Dichloroethene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,2-Dichloropropane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,3-Dichloropropane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
2,2-Dichloropropane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,1-Dichloropropene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Hexachlorobutadiene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Isopropylbenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
4-Isopropyltoluene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Methylene chloride	ND	0.00279		mg/Kg	1	10/9/2012 9:41:06 PM
n-Butylbenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
2-Hexanone	ND	0.00931		mg/Kg	1	10/9/2012 9:41:06 PM
n-Propylbenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
sec-Butylbenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Styrene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
4-Methyl-2-pentanone	ND	0.00931		mg/Kg	1	10/9/2012 9:41:06 PM
tert-Butylbenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,1,1,2-Tetrachloroethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,1,2,2-Tetrachloroethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Tetrachloroethene (PCE)	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
trans-1,2-DCE	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
trans-1,3-Dichloropropene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,2,3-Trichlorobenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,2,4-Trichlorobenzene	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,1,1-Trichloroethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
1,1,2-Trichloroethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Trichloroethene (TCE)	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Trichlorofluoromethane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (10-12')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:30:00 AM
Lab ID: 1210372-007
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Vinyl chloride	ND	0.000931		mg/Kg	1	10/9/2012 9:41:06 PM
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%REC	1	10/9/2012 9:41:06 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	1	10/9/2012 9:41:06 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/9/2012 9:41:06 PM
Surr: Toluene-d8	123	70-130		%REC	1	10/9/2012 9:41:06 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (12-14')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:40:00 AM
Lab ID: 1210372-008
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	53	9.9		mg/Kg	1	10/9/2012 1:04:41 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 1:04:41 PM
Surr: DNOP	103	77.6-140		%REC	1	10/9/2012 1:04:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/10/2012 7:06:08 PM
Surr: BFB	140	84-116	S	%REC	1	10/10/2012 7:06:08 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.044	0.033		mg/kg	1	10/11/2012 3:30:31 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 4:25:38 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 4:25:38 PM
Barium	370	5.0		mg/Kg	50	10/11/2012 4:28:05 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 4:25:38 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 4:25:38 PM
Chromium	10	1.5		mg/Kg	5	10/11/2012 4:25:38 PM
Cobalt	4.1	1.5		mg/Kg	5	10/11/2012 4:25:38 PM
Iron	8000	500		mg/Kg	500	10/11/2012 4:30:34 PM
Lead	2.0	1.2		mg/Kg	5	10/11/2012 4:25:38 PM
Manganese	540	5.0		mg/Kg	50	10/11/2012 4:28:05 PM
Nickel	6.8	2.5		mg/Kg	5	10/11/2012 4:25:38 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 4:25:38 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 4:25:38 PM
Vanadium	15	12		mg/Kg	5	10/11/2012 4:25:38 PM
Zinc	18	12		mg/Kg	5	10/11/2012 4:25:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Aniline	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Anthracene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Azobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM

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Lab ID: 1210372-008
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Carbazole	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/10/2012 2:10:57 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Chrysene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	10/10/2012 2:10:57 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/10/2012 2:10:57 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/10/2012 2:10:57 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/10/2012 2:10:57 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/10/2012 2:10:57 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Fluorene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Isophorone	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Naphthalene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/10/2012 2:10:57 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/10/2012 2:10:57 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/10/2012 2:10:57 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Phenol	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Pyrene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Pyridine	ND	2.5		mg/Kg	1	10/10/2012 2:10:57 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/10/2012 2:10:57 PM
Surr: 2,4,6-Tribromophenol	101	21.3-145		%REC	1	10/10/2012 2:10:57 PM
Surr: 2-Fluorobiphenyl	85.7	20-131		%REC	1	10/10/2012 2:10:57 PM
Surr: 2-Fluorophenol	91.5	11.9-130		%REC	1	10/10/2012 2:10:57 PM
Surr: 4-Terphenyl-d14	82.4	25.1-149		%REC	1	10/10/2012 2:10:57 PM
Surr: Nitrobenzene-d5	84.9	25.6-137		%REC	1	10/10/2012 2:10:57 PM
Surr: Phenol-d5	97.2	20.3-132		%REC	1	10/10/2012 2:10:57 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Toluene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Ethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Naphthalene	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/16/2012 1:00:38 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/16/2012 1:00:38 AM
Acetone	ND	0.75		mg/Kg	1	10/16/2012 1:00:38 AM
Bromobenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Bromoform	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Bromomethane	ND	0.15		mg/Kg	1	10/16/2012 1:00:38 AM
2-Butanone	ND	0.50		mg/Kg	1	10/16/2012 1:00:38 AM
Carbon disulfide	ND	0.50		mg/Kg	1	10/16/2012 1:00:38 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
Chlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Chloroethane	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (12-14')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:40:00 AM
Lab ID: 1210372-008
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Chloroform	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Chloromethane	ND	0.15		mg/Kg	1	10/16/2012 1:00:38 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Dibromomethane	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
2-Hexanone	ND	0.50		mg/Kg	1	10/16/2012 1:00:38 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/16/2012 1:00:38 AM
Methylene chloride	ND	0.15		mg/Kg	1	10/16/2012 1:00:38 AM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/16/2012 1:00:38 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Styrene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (12-14')
Project: SWMU NO.1
Collection Date: 10/5/2012 10:40:00 AM
Lab ID: 1210372-008
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Vinyl chloride	ND	0.050		mg/Kg	1	10/16/2012 1:00:38 AM
Xylenes, Total	ND	0.10		mg/Kg	1	10/16/2012 1:00:38 AM
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%REC	1	10/16/2012 1:00:38 AM
Surr: 4-Bromofluorobenzene	74.4	70-130		%REC	1	10/16/2012 1:00:38 AM
Surr: Dibromofluoromethane	92.3	70-130		%REC	1	10/16/2012 1:00:38 AM
Surr: Toluene-d8	100	70-130		%REC	1	10/16/2012 1:00:38 AM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-009
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/9/2012 10:53:40 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 10:53:40 AM
Surr: DNOP	93.9	77.6-140		%REC	1	10/9/2012 10:53:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/11/2012 12:22:40 AM
Surr: BFB	105	84-116		%REC	1	10/11/2012 12:22:40 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:32:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 4:33:26 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 4:33:26 PM
Barium	550	5.0		mg/Kg	50	10/11/2012 4:43:28 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 4:33:26 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 4:33:26 PM
Chromium	6.9	1.5		mg/Kg	5	10/11/2012 4:33:26 PM
Cobalt	4.4	1.5		mg/Kg	5	10/11/2012 4:33:26 PM
Iron	11000	500		mg/Kg	500	10/11/2012 4:45:54 PM
Lead	2.8	1.2		mg/Kg	5	10/11/2012 4:33:26 PM
Manganese	740	5.0		mg/Kg	50	10/11/2012 4:43:28 PM
Nickel	6.1	2.5		mg/Kg	5	10/11/2012 4:33:26 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 4:33:26 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 4:33:26 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 4:33:26 PM
Zinc	14	12		mg/Kg	5	10/11/2012 4:33:26 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-009
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 5:30:21 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 5:30:21 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 5:30:21 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 5:30:21 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 5:30:21 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 5:30:21 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-009
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 5:30:21 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 5:30:21 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 5:30:21 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 5:30:21 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:30:21 AM
Surr: 2,4,6-Tribromophenol	90.6	21.3-145		%REC	1	10/10/2012 5:30:21 AM
Surr: 2-Fluorobiphenyl	73.0	20-131		%REC	1	10/10/2012 5:30:21 AM
Surr: 2-Fluorophenol	85.9	11.9-130		%REC	1	10/10/2012 5:30:21 AM
Surr: 4-Terphenyl-d14	69.8	25.1-149		%REC	1	10/10/2012 5:30:21 AM
Surr: Nitrobenzene-d5	76.0	25.6-137		%REC	1	10/10/2012 5:30:21 AM
Surr: Phenol-d5	81.7	20.3-132		%REC	1	10/10/2012 5:30:21 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Toluene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Ethylbenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Xylenes, Total	ND	0.00222		mg/Kg	1	10/10/2012 3:08:16 PM
Methyl tert-butyl ether (MTBE)	0.0241	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,2,4-Trimethylbenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,3,5-Trimethylbenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,2-Dichloroethane (EDC)	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,2-Dibromoethane (EDB)	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Naphthalene	ND	0.00222		mg/Kg	1	10/10/2012 3:08:16 PM
1-Methylnaphthalene	ND	0.00443		mg/Kg	1	10/10/2012 3:08:16 PM
2-Methylnaphthalene	ND	0.00443		mg/Kg	1	10/10/2012 3:08:16 PM
Acetone	0.0364	0.0111		mg/Kg	1	10/10/2012 3:08:16 PM
Bromobenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Bromodichloromethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Bromoform	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Bromomethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
2-Butanone	ND	0.0111		mg/Kg	1	10/10/2012 3:08:16 PM
Carbon tetrachloride	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Chlorobenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Chloroethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-009
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Chloromethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
2-Chlorotoluene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Carbon disulfide	ND	0.0111		mg/Kg	1	10/10/2012 3:08:16 PM
4-Chlorotoluene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
cis-1,2-DCE	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
cis-1,3-Dichloropropene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,2-Dibromo-3-chloropropane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Dibromochloromethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Dibromomethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,2-Dichlorobenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,3-Dichlorobenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,4-Dichlorobenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Dichlorodifluoromethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,1-Dichloroethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,1-Dichloroethene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,2-Dichloropropane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,3-Dichloropropane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
2,2-Dichloropropane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,1-Dichloropropene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Hexachlorobutadiene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Isopropylbenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
4-Isopropyltoluene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Methylene chloride	ND	0.00332		mg/Kg	1	10/10/2012 3:08:16 PM
n-Butylbenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
2-Hexanone	ND	0.0111		mg/Kg	1	10/10/2012 3:08:16 PM
n-Propylbenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
sec-Butylbenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Styrene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
4-Methyl-2-pentanone	ND	0.0111		mg/Kg	1	10/10/2012 3:08:16 PM
tert-Butylbenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,1,1,2-Tetrachloroethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,1,2,2-Tetrachloroethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Tetrachloroethene (PCE)	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
trans-1,2-DCE	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
trans-1,3-Dichloropropene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,2,3-Trichlorobenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,2,4-Trichlorobenzene	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,1,1-Trichloroethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
1,1,2-Trichloroethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Trichloroethene (TCE)	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Trichlorofluoromethane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 (16-18')
Project: SWMU NO.1
Collection Date: 10/5/2012 11:10:00 AM
Lab ID: 1210372-009
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Vinyl chloride	ND	0.00111		mg/Kg	1	10/10/2012 3:08:16 PM
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	10/10/2012 3:08:16 PM
Surr: 4-Bromofluorobenzene	91.7	70-130		%REC	1	10/10/2012 3:08:16 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/10/2012 3:08:16 PM
Surr: Toluene-d8	88.8	70-130		%REC	1	10/10/2012 3:08:16 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100512
Project: SWMU NO.1
Collection Date: 10/5/2012 5:40:00 PM
Lab ID: 1210372-010
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/8/2012 5:48:01 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 5:48:01 PM
Surr: DNOP	120	79.5-166		%REC	1	10/8/2012 5:48:01 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/10/2012 5:46:36 PM
Surr: BFB	118	69.8-119		%REC	1	10/10/2012 5:46:36 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	ND	0.10		mg/L	1	10/11/2012 3:10:22 AM
Chloride	ND	0.50		mg/L	1	10/8/2012 8:16:41 PM
Sulfate	ND	0.50		mg/L	1	10/8/2012 8:16:41 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	10/10/2012 9:35:20 PM
Beryllium	ND	0.0020		mg/L	1	10/10/2012 9:35:20 PM
Cadmium	ND	0.0020		mg/L	1	10/10/2012 9:35:20 PM
Chromium	ND	0.0060		mg/L	1	10/10/2012 9:35:20 PM
Cobalt	ND	0.0060		mg/L	1	10/10/2012 9:35:20 PM
Iron	0.030	0.020		mg/L	1	10/10/2012 9:35:20 PM
Manganese	ND	0.0020		mg/L	1	10/10/2012 9:35:20 PM
Nickel	ND	0.010		mg/L	1	10/10/2012 9:35:20 PM
Silver	ND	0.0050		mg/L	1	10/10/2012 9:35:20 PM
Vanadium	ND	0.050		mg/L	1	10/10/2012 9:35:20 PM
Zinc	ND	0.010		mg/L	1	10/12/2012 8:02:27 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/17/2012 11:21:13 AM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 11:21:13 AM
Lead	ND	0.0010		mg/L	1	10/17/2012 11:21:13 AM
Selenium	ND	0.0010		mg/L	1	10/17/2012 11:21:13 AM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	10/12/2012 4:49:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Acenaphthylene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Aniline	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Anthracene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Azobenzene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Benz(a)anthracene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/11/2012 10:38:52 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100512
Project: SWMU NO.1
Collection Date: 10/5/2012 5:40:00 PM
Lab ID: 1210372-010
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Benzoic acid	ND	20		µg/L	1	10/11/2012 10:38:52 PM
Benzyl alcohol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/11/2012 10:38:52 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Carbazole	ND	10		µg/L	1	10/11/2012 10:38:52 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
4-Chloroaniline	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2-Chlorophenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Chrysene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Dibenzofuran	ND	10		µg/L	1	10/11/2012 10:38:52 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Diethyl phthalate	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Dimethyl phthalate	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/11/2012 10:38:52 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/11/2012 10:38:52 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/11/2012 10:38:52 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Fluoranthene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Fluorene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Hexachlorobenzene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Hexachloroethane	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Isophorone	ND	10		µg/L	1	10/11/2012 10:38:52 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/11/2012 10:38:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100512
Project: SWMU NO.1
Collection Date: 10/5/2012 5:40:00 PM
Lab ID: 1210372-010
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
3+4-Methylphenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/11/2012 10:38:52 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/11/2012 10:38:52 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Naphthalene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2-Nitroaniline	ND	10		µg/L	1	10/11/2012 10:38:52 PM
3-Nitroaniline	ND	10		µg/L	1	10/11/2012 10:38:52 PM
4-Nitroaniline	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Nitrobenzene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2-Nitrophenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
4-Nitrophenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Pentachlorophenol	ND	20		µg/L	1	10/11/2012 10:38:52 PM
Phenanthrene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Phenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Pyrene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Pyridine	ND	10		µg/L	1	10/11/2012 10:38:52 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/11/2012 10:38:52 PM
Surr: 2,4,6-Tribromophenol	81.3	44.2-126		%REC	1	10/11/2012 10:38:52 PM
Surr: 2-Fluorobiphenyl	75.4	37-114		%REC	1	10/11/2012 10:38:52 PM
Surr: 2-Fluorophenol	61.0	23.4-98		%REC	1	10/11/2012 10:38:52 PM
Surr: 4-Terphenyl-d14	70.8	41.3-116		%REC	1	10/11/2012 10:38:52 PM
Surr: Nitrobenzene-d5	82.9	39.5-118		%REC	1	10/11/2012 10:38:52 PM
Surr: Phenol-d5	49.6	20.9-95.9		%REC	1	10/11/2012 10:38:52 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Toluene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Ethylbenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Naphthalene	ND	2.0		µg/L	1	10/9/2012 2:49:27 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 2:49:27 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 2:49:27 PM
Acetone	ND	10		µg/L	1	10/9/2012 2:49:27 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100512
Project: SWMU NO.1
Collection Date: 10/5/2012 5:40:00 PM
Lab ID: 1210372-010
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Bromoform	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 2:49:27 PM
2-Butanone	ND	10		µg/L	1	10/9/2012 2:49:27 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 2:49:27 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 2:49:27 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 2:49:27 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 2:49:27 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 2:49:27 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
2-Hexanone	ND	10		µg/L	1	10/9/2012 2:49:27 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/9/2012 2:49:27 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 2:49:27 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 2:49:27 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 2:49:27 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100512
Project: SWMU NO.1
Collection Date: 10/5/2012 5:40:00 PM
Lab ID: 1210372-010
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 2:49:27 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 2:49:27 PM
Xylenes, Total	ND	1.5		µg/L	1	10/9/2012 2:49:27 PM
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%REC	1	10/9/2012 2:49:27 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/9/2012 2:49:27 PM
Surr: Dibromofluoromethane	93.7	70-130		%REC	1	10/9/2012 2:49:27 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	10/9/2012 2:49:27 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210372-011
Matrix: TRIP BLANK
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Toluene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Ethylbenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Naphthalene	ND	2.0		µg/L	1	10/9/2012 4:42:30 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 4:42:30 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 4:42:30 PM
Acetone	ND	10		µg/L	1	10/9/2012 4:42:30 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Bromoform	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 4:42:30 PM
2-Butanone	ND	10		µg/L	1	10/9/2012 4:42:30 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 4:42:30 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 4:42:30 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 4:42:30 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 4:42:30 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 4:42:30 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
2-Hexanone	ND	10		µg/L	1	10/9/2012 4:42:30 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210372-011
Matrix: TRIP BLANK
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Isopropylbenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/9/2012 4:42:30 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 4:42:30 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 4:42:30 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 4:42:30 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 4:42:30 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 4:42:30 PM
Xylenes, Total	ND	1.5		µg/L	1	10/9/2012 4:42:30 PM
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	1	10/9/2012 4:42:30 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1	10/9/2012 4:42:30 PM
Surr: Dibromofluoromethane	91.8	70-130		%REC	1	10/9/2012 4:42:30 PM
Surr: Toluene-d8	95.1	70-130		%REC	1	10/9/2012 4:42:30 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 7:45:00 AM
Lab ID: 1210372-012
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	4.8	1.0	*	mg/L	10	10/17/2012 9:32:31 PM
Chloride	1900	50		mg/L	100	10/11/2012 10:02:24 PM
Sulfate	180	2.5		mg/L	5	10/8/2012 8:29:06 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	1.2	0.010		mg/L	5	10/10/2012 6:35:24 PM
Beryllium	ND	0.0020		mg/L	1	10/10/2012 6:31:32 PM
Cadmium	ND	0.0020		mg/L	1	10/10/2012 6:31:32 PM
Chromium	ND	0.0060		mg/L	1	10/10/2012 6:31:32 PM
Cobalt	0.011	0.0060		mg/L	1	10/10/2012 6:31:32 PM
Iron	0.32	0.020	*	mg/L	1	10/10/2012 6:31:32 PM
Manganese	0.99	0.0020	*	mg/L	1	10/10/2012 6:31:32 PM
Nickel	0.13	0.010	*	mg/L	1	10/10/2012 6:31:32 PM
Silver	ND	0.0050		mg/L	1	10/10/2012 6:31:32 PM
Vanadium	ND	0.050		mg/L	1	10/10/2012 6:31:32 PM
Zinc	0.047	0.010		mg/L	1	10/10/2012 6:31:32 PM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0025		mg/L	2.5	10/15/2012 5:07:00 PM
Arsenic	0.016	0.0025	*	mg/L	2.5	10/15/2012 5:07:00 PM
Lead	ND	0.0025		mg/L	2.5	10/15/2012 5:07:00 PM
Selenium	0.0073	0.0025		mg/L	2.5	10/15/2012 5:07:00 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	10/12/2012 4:51:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 3:20:00 PM
Lab ID: 1210372-013
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/8/2012 6:13:37 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 6:13:37 PM
Surr: DNOP	123	79.5-166		%REC	1	10/8/2012 6:13:37 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.26	0.10		mg/L	2	10/10/2012 6:16:46 PM
Surr: BFB	121	69.8-119	S	%REC	2	10/10/2012 6:16:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Acenaphthylene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Aniline	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Anthracene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Azobenzene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Benz(a)anthracene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Benzoic acid	ND	20		µg/L	1	10/11/2012 11:08:06 PM
Benzyl alcohol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/11/2012 11:08:06 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Carbazole	ND	10		µg/L	1	10/11/2012 11:08:06 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
4-Chloroaniline	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2-Chlorophenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Chrysene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Dibenzofuran	ND	10		µg/L	1	10/11/2012 11:08:06 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Diethyl phthalate	ND	10		µg/L	1	10/11/2012 11:08:06 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 3:20:00 PM
Lab ID: 1210372-013
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Dimethyl phthalate	13	10		µg/L	1	10/11/2012 11:08:06 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/11/2012 11:08:06 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/11/2012 11:08:06 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/11/2012 11:08:06 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Fluoranthene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Fluorene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Hexachlorobenzene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Hexachloroethane	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Isophorone	ND	10		µg/L	1	10/11/2012 11:08:06 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2-Methylphenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
3+4-Methylphenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/11/2012 11:08:06 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/11/2012 11:08:06 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Naphthalene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:08:06 PM
3-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:08:06 PM
4-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Nitrobenzene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2-Nitrophenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
4-Nitrophenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Pentachlorophenol	ND	20		µg/L	1	10/11/2012 11:08:06 PM
Phenanthrene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Phenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Pyrene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Pyridine	ND	10		µg/L	1	10/11/2012 11:08:06 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/11/2012 11:08:06 PM
Surr: 2,4,6-Tribromophenol	78.9	44.2-126		%REC	1	10/11/2012 11:08:06 PM
Surr: 2-Fluorobiphenyl	65.7	37-114		%REC	1	10/11/2012 11:08:06 PM
Surr: 2-Fluorophenol	46.7	23.4-98		%REC	1	10/11/2012 11:08:06 PM
Surr: 4-Terphenyl-d14	63.0	41.3-116		%REC	1	10/11/2012 11:08:06 PM
Surr: Nitrobenzene-d5	59.8	39.5-118		%REC	1	10/11/2012 11:08:06 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 3:20:00 PM
Lab ID: 1210372-013
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Surr: Phenol-d5	37.7	20.9-95.9		%REC	1	10/11/2012 11:08:06 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	4.5	2.0		µg/L	2	10/9/2012 5:10:44 PM
Toluene	7.2	2.0		µg/L	2	10/9/2012 5:10:44 PM
Ethylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Naphthalene	ND	4.0		µg/L	2	10/9/2012 5:10:44 PM
1-Methylnaphthalene	ND	8.0		µg/L	2	10/9/2012 5:10:44 PM
2-Methylnaphthalene	ND	8.0		µg/L	2	10/9/2012 5:10:44 PM
Acetone	49	20		µg/L	2	10/9/2012 5:10:44 PM
Bromobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Bromodichloromethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Bromoform	2.7	2.0		µg/L	2	10/9/2012 5:10:44 PM
Bromomethane	ND	6.0		µg/L	2	10/9/2012 5:10:44 PM
2-Butanone	20	20		µg/L	2	10/9/2012 5:10:44 PM
Carbon disulfide	ND	20		µg/L	2	10/9/2012 5:10:44 PM
Carbon Tetrachloride	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Chlorobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Chloroethane	ND	4.0		µg/L	2	10/9/2012 5:10:44 PM
Chloroform	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Chloromethane	ND	6.0		µg/L	2	10/9/2012 5:10:44 PM
2-Chlorotoluene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
4-Chlorotoluene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
cis-1,2-DCE	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	10/9/2012 5:10:44 PM
Dibromochloromethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Dibromomethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Dichlorodifluoromethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1-Dichloroethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1-Dichloroethene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2-Dichloropropane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,3-Dichloropropane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
2,2-Dichloropropane	ND	4.0		µg/L	2	10/9/2012 5:10:44 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-5 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 3:20:00 PM
Lab ID: 1210372-013
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Hexachlorobutadiene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
2-Hexanone	ND	20		µg/L	2	10/9/2012 5:10:44 PM
Isopropylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
4-Isopropyltoluene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
4-Methyl-2-pentanone	ND	20		µg/L	2	10/9/2012 5:10:44 PM
Methylene Chloride	ND	6.0		µg/L	2	10/9/2012 5:10:44 PM
n-Butylbenzene	ND	6.0		µg/L	2	10/9/2012 5:10:44 PM
n-Propylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
sec-Butylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Styrene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
tert-Butylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	10/9/2012 5:10:44 PM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
trans-1,2-DCE	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Trichloroethene (TCE)	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Trichlorofluoromethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	10/9/2012 5:10:44 PM
Vinyl chloride	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Xylenes, Total	ND	3.0		µg/L	2	10/9/2012 5:10:44 PM
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	2	10/9/2012 5:10:44 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	2	10/9/2012 5:10:44 PM
Surr: Dibromofluoromethane	97.8	70-130		%REC	2	10/9/2012 5:10:44 PM
Surr: Toluene-d8	97.0	70-130		%REC	2	10/9/2012 5:10:44 PM

Qualifiers:

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 4:05:00 PM
Lab ID: 1210372-014
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/8/2012 6:39:15 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 6:39:15 PM
Surr: DNOP	122	79.5-166		%REC	1	10/8/2012 6:39:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1.0	0.050		mg/L	1	10/10/2012 6:46:57 PM
Surr: BFB	165	69.8-119	S	%REC	1	10/10/2012 6:46:57 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	0.78	0.10		mg/L	1	10/11/2012 3:47:36 AM
Chloride	660	25		mg/L	50	10/11/2012 10:14:48 PM
Sulfate	52	2.5		mg/L	5	10/8/2012 8:53:56 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	4.7	0.020	*	mg/L	5	10/10/2012 6:57:30 PM
Beryllium	0.0065	0.0040	*	mg/L	1	10/10/2012 6:54:11 PM
Cadmium	ND	0.0040		mg/L	1	10/10/2012 6:54:11 PM
Chromium	0.058	0.012		mg/L	1	10/12/2012 8:21:18 AM
Cobalt	0.053	0.012		mg/L	1	10/10/2012 6:54:11 PM
Iron	39	2.0	*	mg/L	50	10/12/2012 8:24:41 AM
Manganese	7.9	0.020	*	mg/L	5	10/10/2012 6:57:30 PM
Nickel	0.11	0.020	*	mg/L	1	10/10/2012 6:54:11 PM
Silver	ND	0.010		mg/L	1	10/10/2012 6:54:11 PM
Vanadium	ND	0.10		mg/L	1	10/10/2012 6:54:11 PM
Zinc	0.11	0.020		mg/L	1	10/12/2012 8:21:18 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0050		mg/L	2.5	10/15/2012 5:10:56 PM
Arsenic	0.032	0.0050	*	mg/L	2.5	10/15/2012 5:10:56 PM
Lead	0.078	0.0050	*	mg/L	2.5	10/15/2012 5:10:56 PM
Selenium	0.0075	0.0050		mg/L	2.5	10/15/2012 5:10:56 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	10/12/2012 4:52:50 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Acenaphthylene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Aniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Anthracene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Azobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benz(a)anthracene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/11/2012 11:37:31 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 4:05:00 PM
Lab ID: 1210372-014
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benzoic acid	ND	20		µg/L	1	10/11/2012 11:37:31 PM
Benzyl alcohol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Carbazole	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Chloroaniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Chlorophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Chrysene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Dibenzofuran	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Diethyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Dimethyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/11/2012 11:37:31 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/11/2012 11:37:31 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/11/2012 11:37:31 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Fluoranthene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Fluorene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Hexachlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Hexachloroethane	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Isophorone	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/11/2012 11:37:31 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 4:05:00 PM
Lab ID: 1210372-014
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
3+4-Methylphenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Naphthalene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
3-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Nitrobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Nitrophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Nitrophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Pentachlorophenol	ND	20		µg/L	1	10/11/2012 11:37:31 PM
Phenanthrene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Phenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Pyrene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Pyridine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Surr: 2,4,6-Tribromophenol	77.6	44.2-126		%REC	1	10/11/2012 11:37:31 PM
Surr: 2-Fluorobiphenyl	75.6	37-114		%REC	1	10/11/2012 11:37:31 PM
Surr: 2-Fluorophenol	62.3	23.4-98		%REC	1	10/11/2012 11:37:31 PM
Surr: 4-Terphenyl-d14	61.0	41.3-116		%REC	1	10/11/2012 11:37:31 PM
Surr: Nitrobenzene-d5	78.2	39.5-118		%REC	1	10/11/2012 11:37:31 PM
Surr: Phenol-d5	45.5	20.9-95.9		%REC	1	10/11/2012 11:37:31 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	2.3	1.0		µg/L	1	10/9/2012 5:38:50 PM
Toluene	2.3	1.0		µg/L	1	10/9/2012 5:38:50 PM
Ethylbenzene	2.8	1.0		µg/L	1	10/9/2012 5:38:50 PM
Methyl tert-butyl ether (MTBE)	310	10		µg/L	10	10/10/2012 3:10:30 PM
1,2,4-Trimethylbenzene	6.9	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,3,5-Trimethylbenzene	1.5	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Naphthalene	2.3	2.0		µg/L	1	10/9/2012 5:38:50 PM
1-Methylnaphthalene	9.8	4.0		µg/L	1	10/9/2012 5:38:50 PM
2-Methylnaphthalene	10	4.0		µg/L	1	10/9/2012 5:38:50 PM
Acetone	58	10		µg/L	1	10/9/2012 5:38:50 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 4:05:00 PM
Lab ID: 1210372-014
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Bromoform	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 5:38:50 PM
2-Butanone	ND	10		µg/L	1	10/9/2012 5:38:50 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 5:38:50 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 5:38:50 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
2-Hexanone	ND	10		µg/L	1	10/9/2012 5:38:50 PM
Isopropylbenzene	1.3	1.0		µg/L	1	10/9/2012 5:38:50 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/9/2012 5:38:50 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 5:38:50 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 5:38:50 PM
n-Propylbenzene	1.7	1.0		µg/L	1	10/9/2012 5:38:50 PM
sec-Butylbenzene	1.4	1.0		µg/L	1	10/9/2012 5:38:50 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-8 GW
Project: SWMU NO.1
Collection Date: 10/5/2012 4:05:00 PM
Lab ID: 1210372-014
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Xylenes, Total	5.9	1.5		µg/L	1	10/9/2012 5:38:50 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/9/2012 5:38:50 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	1	10/9/2012 5:38:50 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/9/2012 5:38:50 PM
Surr: Toluene-d8	93.2	70-130		%REC	1	10/9/2012 5:38:50 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (16-18')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:40:00 PM
Lab ID: 1210372-015
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/9/2012 11:15:13 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/9/2012 11:15:13 AM
Surr: DNOP	98.6	77.6-140		%REC	1	10/9/2012 11:15:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 1:50:59 AM
Surr: BFB	99.5	84-116		%REC	1	10/9/2012 1:50:59 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:34:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 4:48:45 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 4:48:45 PM
Barium	330	5.0		mg/Kg	50	10/11/2012 4:51:11 PM
Beryllium	1.1	0.75		mg/Kg	5	10/11/2012 4:48:45 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 4:48:45 PM
Chromium	15	1.5		mg/Kg	5	10/11/2012 4:48:45 PM
Cobalt	6.4	1.5		mg/Kg	5	10/11/2012 4:48:45 PM
Iron	22000	500		mg/Kg	500	10/11/2012 4:53:35 PM
Lead	1.7	1.2		mg/Kg	5	10/11/2012 4:48:45 PM
Manganese	510	5.0		mg/Kg	50	10/11/2012 4:51:11 PM
Nickel	13	2.5		mg/Kg	5	10/11/2012 4:48:45 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 4:48:45 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 4:48:45 PM
Vanadium	28	12		mg/Kg	5	10/11/2012 4:48:45 PM
Zinc	25	12		mg/Kg	5	10/11/2012 4:48:45 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (16-18')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:40:00 PM
Lab ID: 1210372-015
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 5:59:23 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 5:59:23 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 5:59:23 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 5:59:23 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 5:59:23 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 5:59:23 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (16-18')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:40:00 PM
Lab ID: 1210372-015
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 5:59:23 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 5:59:23 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 5:59:23 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Surr: 2,4,6-Tribromophenol	73.2	21.3-145		%REC	1	10/10/2012 5:59:23 AM
Surr: 2-Fluorobiphenyl	61.1	20-131		%REC	1	10/10/2012 5:59:23 AM
Surr: 2-Fluorophenol	59.3	11.9-130		%REC	1	10/10/2012 5:59:23 AM
Surr: 4-Terphenyl-d14	63.3	25.1-149		%REC	1	10/10/2012 5:59:23 AM
Surr: Nitrobenzene-d5	57.8	25.6-137		%REC	1	10/10/2012 5:59:23 AM
Surr: Phenol-d5	65.2	20.3-132		%REC	1	10/10/2012 5:59:23 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00136	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Toluene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Ethylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Xylenes, Total	ND	0.00196		mg/Kg	1	10/9/2012 4:02:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2,4-Trimethylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,3,5-Trimethylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dichloroethane (EDC)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dibromoethane (EDB)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Naphthalene	ND	0.00196		mg/Kg	1	10/9/2012 4:02:30 PM
1-Methylnaphthalene	ND	0.00393		mg/Kg	1	10/9/2012 4:02:30 PM
2-Methylnaphthalene	ND	0.00393		mg/Kg	1	10/9/2012 4:02:30 PM
Acetone	0.00987	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
Bromobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Bromodichloromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Bromoform	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Bromomethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
2-Butanone	ND	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
Carbon tetrachloride	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Chlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Chloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (16-18')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:40:00 PM
Lab ID: 1210372-015
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Chloromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
2-Chlorotoluene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Carbon disulfide	ND	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
4-Chlorotoluene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
cis-1,2-DCE	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
cis-1,3-Dichloropropene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dibromo-3-chloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Dibromochloromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Dibromomethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,3-Dichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,4-Dichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Dichlorodifluoromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1-Dichloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1-Dichloroethene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dichloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,3-Dichloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
2,2-Dichloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1-Dichloropropene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Hexachlorobutadiene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Isopropylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
4-Isopropyltoluene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Methylene chloride	ND	0.00295		mg/Kg	1	10/9/2012 4:02:30 PM
n-Butylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
2-Hexanone	ND	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
n-Propylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
sec-Butylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Styrene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
4-Methyl-2-pentanone	ND	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
tert-Butylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1,1,2-Tetrachloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1,2,2-Tetrachloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Tetrachloroethene (PCE)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
trans-1,2-DCE	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
trans-1,3-Dichloropropene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2,3-Trichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2,4-Trichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1,1-Trichloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1,2-Trichloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Trichloroethene (TCE)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Trichlorofluoromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (16-18')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:40:00 PM
Lab ID: 1210372-015
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Vinyl chloride	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	10/9/2012 4:02:30 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1	10/9/2012 4:02:30 PM
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	10/9/2012 4:02:30 PM
Surr: Toluene-d8	99.8	70-130		%REC	1	10/9/2012 4:02:30 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (10-11')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:45:00 AM
Lab ID: 1210372-016
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/9/2012 11:36:49 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 11:36:49 AM
Surr: DNOP	94.1	77.6-140		%REC	1	10/9/2012 11:36:49 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 2:19:49 AM
Surr: BFB	101	84-116		%REC	1	10/9/2012 2:19:49 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:39:21 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 4:56:13 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 4:56:13 PM
Barium	380	5.0		mg/Kg	50	10/11/2012 4:58:37 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 4:56:13 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 4:56:13 PM
Chromium	7.2	1.5		mg/Kg	5	10/11/2012 4:56:13 PM
Cobalt	3.8	1.5		mg/Kg	5	10/11/2012 4:56:13 PM
Iron	11000	500		mg/Kg	500	10/11/2012 5:01:02 PM
Lead	3.6	1.2		mg/Kg	5	10/11/2012 4:56:13 PM
Manganese	750	5.0		mg/Kg	50	10/11/2012 4:58:37 PM
Nickel	5.5	2.5		mg/Kg	5	10/11/2012 4:56:13 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 4:56:13 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 4:56:13 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 4:56:13 PM
Zinc	13	12		mg/Kg	5	10/11/2012 4:56:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (10-11')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:45:00 AM
Lab ID: 1210372-016
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 6:28:22 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 6:28:22 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 6:28:22 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 6:28:22 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 6:28:22 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 6:28:22 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (10-11')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:45:00 AM
Lab ID: 1210372-016
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 6:28:22 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 6:28:22 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 6:28:22 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Surr: 2,4,6-Tribromophenol	64.9	21.3-145		%REC	1	10/10/2012 6:28:22 AM
Surr: 2-Fluorobiphenyl	60.0	20-131		%REC	1	10/10/2012 6:28:22 AM
Surr: 2-Fluorophenol	60.5	11.9-130		%REC	1	10/10/2012 6:28:22 AM
Surr: 4-Terphenyl-d14	55.8	25.1-149		%REC	1	10/10/2012 6:28:22 AM
Surr: Nitrobenzene-d5	61.6	25.6-137		%REC	1	10/10/2012 6:28:22 AM
Surr: Phenol-d5	61.6	20.3-132		%REC	1	10/10/2012 6:28:22 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Toluene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Ethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Xylenes, Total	ND	0.00213		mg/Kg	1	10/9/2012 4:33:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2,4-Trimethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,3,5-Trimethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dichloroethane (EDC)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dibromoethane (EDB)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Naphthalene	ND	0.00213		mg/Kg	1	10/9/2012 4:33:16 PM
1-Methylnaphthalene	ND	0.00426		mg/Kg	1	10/9/2012 4:33:16 PM
2-Methylnaphthalene	ND	0.00426		mg/Kg	1	10/9/2012 4:33:16 PM
Acetone	0.0539	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
Bromobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Bromodichloromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Bromoform	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Bromomethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
2-Butanone	ND	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
Carbon tetrachloride	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Chlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Chloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (10-11')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:45:00 AM
Lab ID: 1210372-016
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Chloromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
2-Chlorotoluene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Carbon disulfide	ND	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
4-Chlorotoluene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
cis-1,2-DCE	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
cis-1,3-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dibromo-3-chloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Dibromochloromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Dibromomethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,3-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,4-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Dichlorodifluoromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1-Dichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1-Dichloroethene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,3-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
2,2-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Hexachlorobutadiene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Isopropylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
4-Isopropyltoluene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Methylene chloride	ND	0.00320		mg/Kg	1	10/9/2012 4:33:16 PM
n-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
2-Hexanone	ND	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
n-Propylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
sec-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Styrene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
4-Methyl-2-pentanone	ND	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
tert-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1,1,2-Tetrachloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1,2,2-Tetrachloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Tetrachloroethene (PCE)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
trans-1,2-DCE	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
trans-1,3-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2,3-Trichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2,4-Trichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1,1-Trichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1,2-Trichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Trichloroethene (TCE)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Trichlorofluoromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (10-11')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:45:00 AM
Lab ID: 1210372-016
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Vinyl chloride	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%REC	1	10/9/2012 4:33:16 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/9/2012 4:33:16 PM
Surr: Dibromofluoromethane	93.6	70-130		%REC	1	10/9/2012 4:33:16 PM
Surr: Toluene-d8	89.3	70-130		%REC	1	10/9/2012 4:33:16 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (11-12')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:55:00 AM
Lab ID: 1210372-017
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/9/2012 10:44:56 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 10:44:56 AM
Surr: DNOP	101	77.6-140		%REC	1	10/9/2012 10:44:56 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 2:48:36 AM
Surr: BFB	103	84-116		%REC	1	10/9/2012 2:48:36 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:41:07 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 5:03:56 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 5:03:56 PM
Barium	700	5.0		mg/Kg	50	10/11/2012 5:12:21 PM
Beryllium	0.96	0.75		mg/Kg	5	10/11/2012 5:03:56 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 5:03:56 PM
Chromium	14	1.5		mg/Kg	5	10/11/2012 5:03:56 PM
Cobalt	6.2	1.5		mg/Kg	5	10/11/2012 5:03:56 PM
Iron	18000	500		mg/Kg	500	10/11/2012 5:16:24 PM
Lead	ND	1.2		mg/Kg	5	10/11/2012 5:03:56 PM
Manganese	480	5.0		mg/Kg	50	10/11/2012 5:12:21 PM
Nickel	12	2.5		mg/Kg	5	10/11/2012 5:03:56 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 5:03:56 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 5:03:56 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 5:03:56 PM
Zinc	25	12		mg/Kg	5	10/11/2012 5:03:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (11-12')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:55:00 AM
Lab ID: 1210372-017
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 6:57:20 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 6:57:20 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 6:57:20 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 6:57:20 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 6:57:20 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 6:57:20 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (11-12')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:55:00 AM
Lab ID: 1210372-017
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 6:57:20 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 6:57:20 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 6:57:20 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Surr: 2,4,6-Tribromophenol	94.5	21.3-145		%REC	1	10/10/2012 6:57:20 AM
Surr: 2-Fluorobiphenyl	86.5	20-131		%REC	1	10/10/2012 6:57:20 AM
Surr: 2-Fluorophenol	82.6	11.9-130		%REC	1	10/10/2012 6:57:20 AM
Surr: 4-Terphenyl-d14	77.7	25.1-149		%REC	1	10/10/2012 6:57:20 AM
Surr: Nitrobenzene-d5	92.7	25.6-137		%REC	1	10/10/2012 6:57:20 AM
Surr: Phenol-d5	86.3	20.3-132		%REC	1	10/10/2012 6:57:20 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Toluene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Ethylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Xylenes, Total	ND	0.00273		mg/Kg	1	10/9/2012 5:04:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2,4-Trimethylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,3,5-Trimethylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dichloroethane (EDC)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dibromoethane (EDB)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Naphthalene	ND	0.00273		mg/Kg	1	10/9/2012 5:04:01 PM
1-Methylnaphthalene	ND	0.00545		mg/Kg	1	10/9/2012 5:04:01 PM
2-Methylnaphthalene	ND	0.00545		mg/Kg	1	10/9/2012 5:04:01 PM
Acetone	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
Bromobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Bromodichloromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Bromoform	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Bromomethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
2-Butanone	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
Carbon tetrachloride	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Chlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Chloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (11-12')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:55:00 AM
Lab ID: 1210372-017
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Chloromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
2-Chlorotoluene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Carbon disulfide	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
4-Chlorotoluene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
cis-1,2-DCE	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
cis-1,3-Dichloropropene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dibromo-3-chloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Dibromochloromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Dibromomethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,3-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,4-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Dichlorodifluoromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1-Dichloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1-Dichloroethene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dichloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,3-Dichloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
2,2-Dichloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1-Dichloropropene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Hexachlorobutadiene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Isopropylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
4-Isopropyltoluene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Methylene chloride	ND	0.00409		mg/Kg	1	10/9/2012 5:04:01 PM
n-Butylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
2-Hexanone	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
n-Propylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
sec-Butylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Styrene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
4-Methyl-2-pentanone	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
tert-Butylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1,1,2-Tetrachloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1,2,2-Tetrachloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Tetrachloroethene (PCE)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
trans-1,2-DCE	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
trans-1,3-Dichloropropene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2,3-Trichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2,4-Trichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1,1-Trichloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1,2-Trichloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Trichloroethene (TCE)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Trichlorofluoromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (11-12')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:55:00 AM
Lab ID: 1210372-017
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Vinyl chloride	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%REC	1	10/9/2012 5:04:01 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/9/2012 5:04:01 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/9/2012 5:04:01 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/9/2012 5:04:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (12-14')
Project: SWMU NO.1
Collection Date: 10/4/2012 1:55:00 PM
Lab ID: 1210372-018
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/9/2012 11:09:39 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 11:09:39 AM
Surr: DNOP	101	77.6-140		%REC	1	10/9/2012 11:09:39 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 3:17:22 AM
Surr: BFB	107	84-116		%REC	1	10/9/2012 3:17:22 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:14:37 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 5:21:56 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 5:21:56 PM
Barium	87	0.50		mg/Kg	5	10/11/2012 5:21:56 PM
Beryllium	1.1	0.75		mg/Kg	5	10/11/2012 5:21:56 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 5:21:56 PM
Chromium	12	1.5		mg/Kg	5	10/11/2012 5:21:56 PM
Cobalt	5.4	1.5		mg/Kg	5	10/11/2012 5:21:56 PM
Iron	16000	500		mg/Kg	500	10/11/2012 5:26:48 PM
Lead	4.0	1.2		mg/Kg	5	10/11/2012 5:21:56 PM
Manganese	360	5.0		mg/Kg	50	10/11/2012 5:24:24 PM
Nickel	9.3	2.5		mg/Kg	5	10/11/2012 5:21:56 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 5:21:56 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 5:21:56 PM
Vanadium	20	12		mg/Kg	5	10/11/2012 5:21:56 PM
Zinc	18	12		mg/Kg	5	10/11/2012 5:21:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (12-14')
Project: SWMU NO.1
Collection Date: 10/4/2012 1:55:00 PM
Lab ID: 1210372-018
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 7:26:18 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 7:26:18 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 7:26:18 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 7:26:18 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 7:26:18 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 7:26:18 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (12-14')
Project: SWMU NO.1
Collection Date: 10/4/2012 1:55:00 PM
Lab ID: 1210372-018
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 7:26:18 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 7:26:18 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 7:26:18 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Surr: 2,4,6-Tribromophenol	89.5	21.3-145		%REC	1	10/10/2012 7:26:18 AM
Surr: 2-Fluorobiphenyl	85.6	20-131		%REC	1	10/10/2012 7:26:18 AM
Surr: 2-Fluorophenol	85.6	11.9-130		%REC	1	10/10/2012 7:26:18 AM
Surr: 4-Terphenyl-d14	76.0	25.1-149		%REC	1	10/10/2012 7:26:18 AM
Surr: Nitrobenzene-d5	91.1	25.6-137		%REC	1	10/10/2012 7:26:18 AM
Surr: Phenol-d5	90.8	20.3-132		%REC	1	10/10/2012 7:26:18 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Toluene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Ethylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Xylenes, Total	ND	0.00237		mg/Kg	1	10/9/2012 5:34:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2,4-Trimethylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,3,5-Trimethylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dichloroethane (EDC)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dibromoethane (EDB)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Naphthalene	ND	0.00237		mg/Kg	1	10/9/2012 5:34:52 PM
1-Methylnaphthalene	ND	0.00475		mg/Kg	1	10/9/2012 5:34:52 PM
2-Methylnaphthalene	ND	0.00475		mg/Kg	1	10/9/2012 5:34:52 PM
Acetone	0.0138	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
Bromobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Bromodichloromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Bromoform	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Bromomethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
2-Butanone	ND	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
Carbon tetrachloride	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Chlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Chloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (12-14')
Project: SWMU NO.1
Collection Date: 10/4/2012 1:55:00 PM
Lab ID: 1210372-018
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Chloromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
2-Chlorotoluene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Carbon disulfide	ND	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
4-Chlorotoluene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
cis-1,2-DCE	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
cis-1,3-Dichloropropene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dibromo-3-chloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Dibromochloromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Dibromomethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,3-Dichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,4-Dichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Dichlorodifluoromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1-Dichloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1-Dichloroethene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dichloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,3-Dichloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
2,2-Dichloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1-Dichloropropene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Hexachlorobutadiene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Isopropylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
4-Isopropyltoluene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Methylene chloride	ND	0.00356		mg/Kg	1	10/9/2012 5:34:52 PM
n-Butylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
2-Hexanone	ND	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
n-Propylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
sec-Butylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Styrene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
4-Methyl-2-pentanone	ND	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
tert-Butylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1,1,2-Tetrachloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1,2,2-Tetrachloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Tetrachloroethene (PCE)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
trans-1,2-DCE	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
trans-1,3-Dichloropropene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2,3-Trichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2,4-Trichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1,1-Trichloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1,2-Trichloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Trichloroethene (TCE)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Trichlorofluoromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (12-14')
Project: SWMU NO.1
Collection Date: 10/4/2012 1:55:00 PM
Lab ID: 1210372-018
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Vinyl chloride	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%REC	1	10/9/2012 5:34:52 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/9/2012 5:34:52 PM
Surr: Dibromofluoromethane	92.3	70-130		%REC	1	10/9/2012 5:34:52 PM
Surr: Toluene-d8	95.2	70-130		%REC	1	10/9/2012 5:34:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (14-16')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:15:00 PM
Lab ID: 1210372-019
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/9/2012 11:34:18 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/9/2012 11:34:18 AM
Surr: DNOP	105	77.6-140		%REC	1	10/9/2012 11:34:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 3:46:11 AM
Surr: BFB	107	84-116		%REC	1	10/9/2012 3:46:11 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:16:25 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 5:29:25 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 5:29:25 PM
Barium	290	5.0		mg/Kg	50	10/11/2012 5:31:52 PM
Beryllium	0.95	0.75		mg/Kg	5	10/11/2012 5:29:25 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 5:29:25 PM
Chromium	11	1.5		mg/Kg	5	10/11/2012 5:29:25 PM
Cobalt	6.0	1.5		mg/Kg	5	10/11/2012 5:29:25 PM
Iron	15000	500		mg/Kg	500	10/11/2012 5:34:18 PM
Lead	3.3	1.2		mg/Kg	5	10/11/2012 5:29:25 PM
Manganese	790	5.0		mg/Kg	50	10/11/2012 5:31:52 PM
Nickel	9.7	2.5		mg/Kg	5	10/11/2012 5:29:25 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 5:29:25 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 5:29:25 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 5:29:25 PM
Zinc	18	12		mg/Kg	5	10/11/2012 5:29:25 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzoic acid	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (14-16')
Project: SWMU NO.1
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Lab ID: 1210372-019
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 7:55:14 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 7:55:14 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 7:55:14 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 7:55:14 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 7:55:14 AM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 7:55:14 AM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Isophorone	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2-Methylphenol	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (14-16')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:15:00 PM
Lab ID: 1210372-019
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 7:55:14 AM
Nitrobenzene	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 7:55:14 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 7:55:14 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Pyridine	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Surr: 2,4,6-Tribromophenol	55.6	21.3-145		%REC	1	10/10/2012 7:55:14 AM
Surr: 2-Fluorobiphenyl	48.8	20-131		%REC	1	10/10/2012 7:55:14 AM
Surr: 2-Fluorophenol	45.8	11.9-130		%REC	1	10/10/2012 7:55:14 AM
Surr: 4-Terphenyl-d14	53.3	25.1-149		%REC	1	10/10/2012 7:55:14 AM
Surr: Nitrobenzene-d5	48.9	25.6-137		%REC	1	10/10/2012 7:55:14 AM
Surr: Phenol-d5	51.9	20.3-132		%REC	1	10/10/2012 7:55:14 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Toluene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Ethylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Xylenes, Total	ND	0.00291		mg/Kg	1	10/9/2012 6:05:43 PM
Methyl tert-butyl ether (MTBE)	0.00190	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2,4-Trimethylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,3,5-Trimethylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dichloroethane (EDC)	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dibromoethane (EDB)	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Naphthalene	ND	0.00291		mg/Kg	1	10/9/2012 6:05:43 PM
1-Methylnaphthalene	ND	0.00581		mg/Kg	1	10/9/2012 6:05:43 PM
2-Methylnaphthalene	ND	0.00581		mg/Kg	1	10/9/2012 6:05:43 PM
Acetone	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
Bromobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Bromodichloromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Bromoform	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Bromomethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
2-Butanone	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
Carbon tetrachloride	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Chlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Chloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (14-16')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:15:00 PM
Lab ID: 1210372-019
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Chloromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
2-Chlorotoluene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Carbon disulfide	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
4-Chlorotoluene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
cis-1,2-DCE	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
cis-1,3-Dichloropropene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dibromo-3-chloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Dibromochloromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Dibromomethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,3-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,4-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Dichlorodifluoromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1-Dichloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1-Dichloroethene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dichloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,3-Dichloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
2,2-Dichloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1-Dichloropropene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Hexachlorobutadiene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Isopropylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
4-Isopropyltoluene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Methylene chloride	ND	0.00436		mg/Kg	1	10/9/2012 6:05:43 PM
n-Butylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
2-Hexanone	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
n-Propylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
sec-Butylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Styrene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
4-Methyl-2-pentanone	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
tert-Butylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1,1,2-Tetrachloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1,2,2-Tetrachloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Tetrachloroethene (PCE)	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
trans-1,2-DCE	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
trans-1,3-Dichloropropene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2,3-Trichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2,4-Trichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1,1-Trichloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1,2-Trichloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Trichloroethene (TCE)	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Trichlorofluoromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 (14-16')
Project: SWMU NO.1
Collection Date: 10/4/2012 2:15:00 PM
Lab ID: 1210372-019
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Vinyl chloride	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%REC	1	10/9/2012 6:05:43 PM
Surr: 4-Bromofluorobenzene	88.4	70-130		%REC	1	10/9/2012 6:05:43 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/9/2012 6:05:43 PM
Surr: Toluene-d8	97.0	70-130		%REC	1	10/9/2012 6:05:43 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (2-4')
Project: SWMU NO.1
Collection Date: 10/4/2012 10:55:00 AM
Lab ID: 1210372-020
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/9/2012 9:05:06 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/9/2012 9:05:06 AM
Surr: DNOP	104	77.6-140		%REC	1	10/9/2012 9:05:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 4:14:57 AM
Surr: BFB	102	84-116		%REC	1	10/9/2012 4:14:57 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:18:12 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	25		mg/Kg	10	10/15/2012 10:16:58 AM
Arsenic	ND	25		mg/Kg	10	10/15/2012 10:16:58 AM
Barium	660	5.0		mg/Kg	50	10/11/2012 5:39:21 PM
Beryllium	ND	1.5		mg/Kg	10	10/15/2012 10:16:58 AM
Cadmium	ND	1.0		mg/Kg	10	10/15/2012 10:16:58 AM
Chromium	6.1	3.0		mg/Kg	10	10/15/2012 10:16:58 AM
Cobalt	3.5	3.0		mg/Kg	10	10/15/2012 10:16:58 AM
Iron	9600	500		mg/Kg	500	10/11/2012 5:49:22 PM
Lead	5.4	2.5		mg/Kg	10	10/15/2012 10:16:58 AM
Manganese	1000	5.0		mg/Kg	50	10/11/2012 5:39:21 PM
Nickel	ND	5.0		mg/Kg	10	10/15/2012 10:16:58 AM
Selenium	ND	25		mg/Kg	10	10/15/2012 10:35:25 AM
Silver	ND	2.5		mg/Kg	10	10/15/2012 10:16:58 AM
Vanadium	ND	25		mg/Kg	10	10/15/2012 10:16:58 AM
Zinc	ND	25		mg/Kg	10	10/15/2012 10:16:58 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (2-4')
Project: SWMU NO.1
Collection Date: 10/4/2012 10:55:00 AM
Lab ID: 1210372-020
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 8:24:14 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 8:24:14 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 8:24:14 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 8:24:14 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 8:24:14 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 8:24:14 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (2-4')
Project: SWMU NO.1
Collection Date: 10/4/2012 10:55:00 AM
Lab ID: 1210372-020
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 8:24:14 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 8:24:14 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 8:24:14 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Surr: 2,4,6-Tribromophenol	82.7	21.3-145		%REC	1	10/10/2012 8:24:14 AM
Surr: 2-Fluorobiphenyl	78.3	20-131		%REC	1	10/10/2012 8:24:14 AM
Surr: 2-Fluorophenol	86.8	11.9-130		%REC	1	10/10/2012 8:24:14 AM
Surr: 4-Terphenyl-d14	72.3	25.1-149		%REC	1	10/10/2012 8:24:14 AM
Surr: Nitrobenzene-d5	88.2	25.6-137		%REC	1	10/10/2012 8:24:14 AM
Surr: Phenol-d5	89.0	20.3-132		%REC	1	10/10/2012 8:24:14 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Toluene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Ethylbenzene	0.00563	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Xylenes, Total	0.0431	0.00213		mg/Kg	1	10/9/2012 6:36:32 PM
Methyl tert-butyl ether (MTBE)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2,4-Trimethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,3,5-Trimethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dichloroethane (EDC)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dibromoethane (EDB)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Naphthalene	ND	0.00213		mg/Kg	1	10/9/2012 6:36:32 PM
1-Methylnaphthalene	ND	0.00427		mg/Kg	1	10/9/2012 6:36:32 PM
2-Methylnaphthalene	ND	0.00427		mg/Kg	1	10/9/2012 6:36:32 PM
Acetone	0.477	0.0107	E	mg/Kg	1	10/9/2012 6:36:32 PM
Bromobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Bromodichloromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Bromoform	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Bromomethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
2-Butanone	ND	0.0107		mg/Kg	1	10/9/2012 6:36:32 PM
Carbon tetrachloride	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Chlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Chloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Lab ID: 1210372-020
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Chloromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
2-Chlorotoluene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Carbon disulfide	ND	0.0107		mg/Kg	1	10/9/2012 6:36:32 PM
4-Chlorotoluene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
cis-1,2-DCE	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
cis-1,3-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dibromo-3-chloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Dibromochloromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Dibromomethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,3-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,4-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Dichlorodifluoromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1-Dichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1-Dichloroethene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,3-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
2,2-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Hexachlorobutadiene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Isopropylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
4-Isopropyltoluene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Methylene chloride	ND	0.00320		mg/Kg	1	10/9/2012 6:36:32 PM
n-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
2-Hexanone	ND	0.0107		mg/Kg	1	10/9/2012 6:36:32 PM
n-Propylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
sec-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Styrene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
4-Methyl-2-pentanone	ND	0.0107		mg/Kg	1	10/9/2012 6:36:32 PM
tert-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1,1,2-Tetrachloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1,2,2-Tetrachloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Tetrachloroethene (PCE)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
trans-1,2-DCE	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
trans-1,3-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2,3-Trichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2,4-Trichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1,1-Trichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1,2-Trichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Trichloroethene (TCE)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Trichlorofluoromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (2-4')
Project: SWMU NO.1
Collection Date: 10/4/2012 10:55:00 AM
Lab ID: 1210372-020
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Vinyl chloride	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Surr: 1,2-Dichloroethane-d4	88.8	70-130		%REC	1	10/9/2012 6:36:32 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/9/2012 6:36:32 PM
Surr: Dibromofluoromethane	97.7	70-130		%REC	1	10/9/2012 6:36:32 PM
Surr: Toluene-d8	106	70-130		%REC	1	10/9/2012 6:36:32 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (2-4') DUP
Project: SWMU NO.1
Collection Date: 10/4/2012 10:55:00 AM
Lab ID: 1210372-021
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/9/2012 9:30:03 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/9/2012 9:30:03 AM
Surr: DNOP	104	77.6-140		%REC	1	10/9/2012 9:30:03 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 4:43:44 AM
Surr: BFB	102	84-116		%REC	1	10/9/2012 4:43:44 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:20:01 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 5:52:15 PM
Arsenic	ND	12		mg/Kg	5	10/15/2012 10:19:16 AM
Barium	930	5.0		mg/Kg	50	10/11/2012 5:57:34 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 5:52:15 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 5:52:15 PM
Chromium	7.0	1.5		mg/Kg	5	10/15/2012 10:19:16 AM
Cobalt	3.9	1.5		mg/Kg	5	10/11/2012 5:52:15 PM
Iron	10000	500		mg/Kg	500	10/11/2012 6:00:01 PM
Lead	5.0	1.2		mg/Kg	5	10/11/2012 5:52:15 PM
Manganese	830	5.0		mg/Kg	50	10/11/2012 5:57:34 PM
Nickel	5.2	2.5		mg/Kg	5	10/11/2012 5:52:15 PM
Selenium	ND	12		mg/Kg	5	10/15/2012 10:37:40 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 5:52:15 PM
Vanadium	24	12		mg/Kg	5	10/11/2012 5:52:15 PM
Zinc	13	12		mg/Kg	5	10/15/2012 10:19:16 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (2-4') DUP
Project: SWMU NO.1
Collection Date: 10/4/2012 10:55:00 AM
Lab ID: 1210372-021
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 8:53:16 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 8:53:16 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 8:53:16 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 8:53:16 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 8:53:16 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 8:53:16 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 8:53:16 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 8:53:16 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 8:53:16 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Surr: 2,4,6-Tribromophenol	75.2	21.3-145		%REC	1	10/10/2012 8:53:16 AM
Surr: 2-Fluorobiphenyl	81.9	20-131		%REC	1	10/10/2012 8:53:16 AM
Surr: 2-Fluorophenol	64.5	11.9-130		%REC	1	10/10/2012 8:53:16 AM
Surr: 4-Terphenyl-d14	74.1	25.1-149		%REC	1	10/10/2012 8:53:16 AM
Surr: Nitrobenzene-d5	74.2	25.6-137		%REC	1	10/10/2012 8:53:16 AM
Surr: Phenol-d5	74.8	20.3-132		%REC	1	10/10/2012 8:53:16 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Toluene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Ethylbenzene	0.00112	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Xylenes, Total	0.00863	0.00170		mg/Kg	1	10/9/2012 7:07:19 PM
Methyl tert-butyl ether (MTBE)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2,4-Trimethylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,3,5-Trimethylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dichloroethane (EDC)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dibromoethane (EDB)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Naphthalene	ND	0.00170		mg/Kg	1	10/9/2012 7:07:19 PM
1-Methylnaphthalene	ND	0.00341		mg/Kg	1	10/9/2012 7:07:19 PM
2-Methylnaphthalene	ND	0.00341		mg/Kg	1	10/9/2012 7:07:19 PM
Acetone	0.460	0.00852	E	mg/Kg	1	10/9/2012 7:07:19 PM
Bromobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Bromodichloromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Bromoform	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Bromomethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
2-Butanone	ND	0.00852		mg/Kg	1	10/9/2012 7:07:19 PM
Carbon tetrachloride	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Chlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Chloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (2-4') DUP
Project: SWMU NO.1
Collection Date: 10/4/2012 10:55:00 AM
Lab ID: 1210372-021
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Chloromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
2-Chlorotoluene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Carbon disulfide	ND	0.00852		mg/Kg	1	10/9/2012 7:07:19 PM
4-Chlorotoluene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
cis-1,2-DCE	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
cis-1,3-Dichloropropene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dibromo-3-chloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Dibromochloromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Dibromomethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,3-Dichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,4-Dichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Dichlorodifluoromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1-Dichloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1-Dichloroethene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dichloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,3-Dichloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
2,2-Dichloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1-Dichloropropene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Hexachlorobutadiene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Isopropylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
4-Isopropyltoluene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Methylene chloride	ND	0.00256		mg/Kg	1	10/9/2012 7:07:19 PM
n-Butylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
2-Hexanone	ND	0.00852		mg/Kg	1	10/9/2012 7:07:19 PM
n-Propylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
sec-Butylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Styrene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
4-Methyl-2-pentanone	ND	0.00852		mg/Kg	1	10/9/2012 7:07:19 PM
tert-Butylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1,1,2-Tetrachloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1,2,2-Tetrachloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Tetrachloroethene (PCE)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
trans-1,2-DCE	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
trans-1,3-Dichloropropene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2,3-Trichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2,4-Trichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1,1-Trichloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1,2-Trichloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Trichloroethene (TCE)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Trichlorofluoromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (2-4') DUP
Project: SWMU NO.1
Collection Date: 10/4/2012 10:55:00 AM
Lab ID: 1210372-021
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Vinyl chloride	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	1	10/9/2012 7:07:19 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	1	10/9/2012 7:07:19 PM
Surr: Dibromofluoromethane	97.8	70-130		%REC	1	10/9/2012 7:07:19 PM
Surr: Toluene-d8	97.0	70-130		%REC	1	10/9/2012 7:07:19 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (4-6')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:15:00 AM
Lab ID: 1210372-022
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/9/2012 9:55:06 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/9/2012 9:55:06 AM
Surr: DNOP	102	77.6-140		%REC	1	10/9/2012 9:55:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/11/2012 12:51:22 AM
Surr: BFB	104	84-116		%REC	1	10/11/2012 12:51:22 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:21:47 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 6:02:53 PM
Arsenic	ND	12		mg/Kg	5	10/15/2012 10:21:33 AM
Barium	870	5.0		mg/Kg	50	10/11/2012 6:05:17 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 6:02:53 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 6:02:53 PM
Chromium	7.0	1.5		mg/Kg	5	10/15/2012 10:21:33 AM
Cobalt	5.7	1.5		mg/Kg	5	10/11/2012 6:02:53 PM
Iron	9500	500		mg/Kg	500	10/11/2012 6:07:44 PM
Lead	5.6	1.2		mg/Kg	5	10/11/2012 6:02:53 PM
Manganese	1100	5.0		mg/Kg	50	10/11/2012 6:05:17 PM
Nickel	5.2	2.5		mg/Kg	5	10/11/2012 6:02:53 PM
Selenium	ND	12		mg/Kg	5	10/15/2012 10:39:58 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 6:02:53 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 6:02:53 PM
Zinc	15	12		mg/Kg	5	10/15/2012 10:21:33 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (4-6')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:15:00 AM
Lab ID: 1210372-022
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 9:22:16 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 9:22:16 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 9:22:16 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 9:22:16 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 9:22:16 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 9:22:16 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (4-6')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:15:00 AM
Lab ID: 1210372-022
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 9:22:16 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 9:22:16 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 9:22:16 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Surr: 2,4,6-Tribromophenol	87.0	21.3-145		%REC	1	10/10/2012 9:22:16 AM
Surr: 2-Fluorobiphenyl	88.5	20-131		%REC	1	10/10/2012 9:22:16 AM
Surr: 2-Fluorophenol	79.6	11.9-130		%REC	1	10/10/2012 9:22:16 AM
Surr: 4-Terphenyl-d14	74.9	25.1-149		%REC	1	10/10/2012 9:22:16 AM
Surr: Nitrobenzene-d5	91.0	25.6-137		%REC	1	10/10/2012 9:22:16 AM
Surr: Phenol-d5	91.3	20.3-132		%REC	1	10/10/2012 9:22:16 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Toluene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Ethylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Xylenes, Total	ND	0.00206		mg/Kg	1	10/9/2012 7:38:03 PM
Methyl tert-butyl ether (MTBE)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2,4-Trimethylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,3,5-Trimethylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dichloroethane (EDC)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dibromoethane (EDB)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Naphthalene	ND	0.00206		mg/Kg	1	10/9/2012 7:38:03 PM
1-Methylnaphthalene	ND	0.00412		mg/Kg	1	10/9/2012 7:38:03 PM
2-Methylnaphthalene	ND	0.00412		mg/Kg	1	10/9/2012 7:38:03 PM
Acetone	0.0625	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
Bromobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Bromodichloromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Bromoform	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Bromomethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
2-Butanone	ND	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
Carbon tetrachloride	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Chlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Chloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (4-6')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:15:00 AM
Lab ID: 1210372-022
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Chloromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
2-Chlorotoluene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Carbon disulfide	ND	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
4-Chlorotoluene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
cis-1,2-DCE	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
cis-1,3-Dichloropropene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dibromo-3-chloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Dibromochloromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Dibromomethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,3-Dichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,4-Dichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Dichlorodifluoromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1-Dichloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1-Dichloroethene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dichloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,3-Dichloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
2,2-Dichloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1-Dichloropropene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Hexachlorobutadiene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Isopropylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
4-Isopropyltoluene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Methylene chloride	ND	0.00309		mg/Kg	1	10/9/2012 7:38:03 PM
n-Butylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
2-Hexanone	ND	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
n-Propylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
sec-Butylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Styrene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
4-Methyl-2-pentanone	ND	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
tert-Butylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1,1,2-Tetrachloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1,2,2-Tetrachloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Tetrachloroethene (PCE)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
trans-1,2-DCE	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
trans-1,3-Dichloropropene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2,3-Trichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2,4-Trichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1,1-Trichloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1,2-Trichloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Trichloroethene (TCE)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Trichlorofluoromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (4-6')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:15:00 AM
Lab ID: 1210372-022
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Vinyl chloride	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	1	10/9/2012 7:38:03 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	1	10/9/2012 7:38:03 PM
Surr: Dibromofluoromethane	110	70-130		%REC	1	10/9/2012 7:38:03 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	10/9/2012 7:38:03 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (7.5-8')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:30:00 AM
Lab ID: 1210372-023
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/9/2012 10:20:19 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 10:20:19 AM
Surr: DNOP	104	77.6-140		%REC	1	10/9/2012 10:20:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/11/2012 1:20:05 AM
Surr: BFB	108	84-116		%REC	1	10/11/2012 1:20:05 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:23:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/11/2012 6:10:37 PM
Arsenic	ND	12		mg/Kg	5	10/15/2012 10:23:51 AM
Barium	110	0.50		mg/Kg	5	10/11/2012 6:10:37 PM
Beryllium	0.83	0.75		mg/Kg	5	10/11/2012 6:10:37 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 6:10:37 PM
Chromium	8.3	1.5		mg/Kg	5	10/15/2012 10:23:51 AM
Cobalt	4.1	1.5		mg/Kg	5	10/11/2012 6:10:37 PM
Iron	13000	500		mg/Kg	500	10/11/2012 6:15:26 PM
Lead	4.1	1.2		mg/Kg	5	10/11/2012 6:10:37 PM
Manganese	390	5.0		mg/Kg	50	10/11/2012 6:13:03 PM
Nickel	6.7	2.5		mg/Kg	5	10/11/2012 6:10:37 PM
Selenium	ND	12		mg/Kg	5	10/15/2012 10:42:12 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 6:10:37 PM
Vanadium	14	12		mg/Kg	5	10/11/2012 6:10:37 PM
Zinc	14	12		mg/Kg	5	10/15/2012 10:23:51 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (7.5-8')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:30:00 AM
Lab ID: 1210372-023
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 9:51:16 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 9:51:16 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 9:51:16 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 9:51:16 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 9:51:16 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 9:51:16 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (7.5-8')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:30:00 AM
Lab ID: 1210372-023
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 9:51:16 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 9:51:16 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 9:51:16 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Surr: 2,4,6-Tribromophenol	78.1	21.3-145		%REC	1	10/10/2012 9:51:16 AM
Surr: 2-Fluorobiphenyl	91.1	20-131		%REC	1	10/10/2012 9:51:16 AM
Surr: 2-Fluorophenol	78.6	11.9-130		%REC	1	10/10/2012 9:51:16 AM
Surr: 4-Terphenyl-d14	77.8	25.1-149		%REC	1	10/10/2012 9:51:16 AM
Surr: Nitrobenzene-d5	94.1	25.6-137		%REC	1	10/10/2012 9:51:16 AM
Surr: Phenol-d5	91.1	20.3-132		%REC	1	10/10/2012 9:51:16 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Toluene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Ethylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Xylenes, Total	ND	0.00247		mg/Kg	1	10/9/2012 8:08:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2,4-Trimethylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,3,5-Trimethylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dichloroethane (EDC)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dibromoethane (EDB)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Naphthalene	ND	0.00247		mg/Kg	1	10/9/2012 8:08:50 PM
1-Methylnaphthalene	ND	0.00494		mg/Kg	1	10/9/2012 8:08:50 PM
2-Methylnaphthalene	ND	0.00494		mg/Kg	1	10/9/2012 8:08:50 PM
Acetone	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
Bromobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Bromodichloromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Bromoform	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Bromomethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
2-Butanone	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
Carbon tetrachloride	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Chlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Chloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (7.5-8')
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Lab ID: 1210372-023
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Chloromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
2-Chlorotoluene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Carbon disulfide	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
4-Chlorotoluene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
cis-1,2-DCE	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
cis-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dibromo-3-chloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Dibromochloromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Dibromomethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,3-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,4-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Dichlorodifluoromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1-Dichloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1-Dichloroethene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,3-Dichloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
2,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1-Dichloropropene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Hexachlorobutadiene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Isopropylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
4-Isopropyltoluene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Methylene chloride	ND	0.00370		mg/Kg	1	10/9/2012 8:08:50 PM
n-Butylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
2-Hexanone	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
n-Propylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
sec-Butylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Styrene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
4-Methyl-2-pentanone	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
tert-Butylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1,1,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1,2,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Tetrachloroethene (PCE)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
trans-1,2-DCE	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
trans-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2,3-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2,4-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1,1-Trichloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1,2-Trichloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Trichloroethene (TCE)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Trichlorofluoromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 (7.5-8')
Project: SWMU NO.1
Collection Date: 10/4/2012 11:30:00 AM
Lab ID: 1210372-023
Matrix: SOIL
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Vinyl chloride	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%REC	1	10/9/2012 8:08:50 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	1	10/9/2012 8:08:50 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/9/2012 8:08:50 PM
Surr: Toluene-d8	94.5	70-130		%REC	1	10/9/2012 8:08:50 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100412
Project: SWMU NO.1
Collection Date: 10/4/2012 5:25:00 PM
Lab ID: 1210372-024
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/8/2012 7:04:53 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 7:04:53 PM
Surr: DNOP	120	79.5-166		%REC	1	10/8/2012 7:04:53 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/11/2012 2:57:02 PM
Surr: BFB	98.2	69.8-119		%REC	1	10/11/2012 2:57:02 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	ND	0.10		mg/L	1	10/11/2012 4:12:25 AM
Chloride	ND	0.50		mg/L	1	10/8/2012 9:18:45 PM
Sulfate	ND	0.50		mg/L	1	10/8/2012 9:18:45 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	10/10/2012 9:44:39 PM
Beryllium	ND	0.0020		mg/L	1	10/10/2012 9:44:39 PM
Cadmium	ND	0.0020		mg/L	1	10/10/2012 9:44:39 PM
Chromium	ND	0.0060		mg/L	1	10/10/2012 9:44:39 PM
Cobalt	ND	0.0060		mg/L	1	10/10/2012 9:44:39 PM
Iron	ND	0.020		mg/L	1	10/10/2012 9:44:39 PM
Manganese	ND	0.0020		mg/L	1	10/10/2012 9:44:39 PM
Nickel	ND	0.010		mg/L	1	10/10/2012 9:44:39 PM
Silver	ND	0.0050		mg/L	1	10/10/2012 9:44:39 PM
Vanadium	ND	0.050		mg/L	1	10/10/2012 9:44:39 PM
Zinc	ND	0.010		mg/L	1	10/12/2012 8:28:25 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/17/2012 11:25:09 AM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 11:25:09 AM
Lead	ND	0.0010		mg/L	1	10/17/2012 11:25:09 AM
Selenium	ND	0.0010		mg/L	1	10/17/2012 11:25:09 AM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	10/12/2012 4:54:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Acenaphthylene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Aniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Anthracene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Azobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benz(a)anthracene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benzo(a)pyrene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/12/2012 12:06:49 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100412
Project: SWMU NO.1
Collection Date: 10/4/2012 5:25:00 PM
Lab ID: 1210372-024
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benzoic acid	ND	20		µg/L	1	10/12/2012 12:06:49 AM
Benzyl alcohol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Butyl benzyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Carbazole	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Chloroaniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Chloronaphthalene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Chlorophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Chrysene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Di-n-butyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Di-n-octyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Dibenzofuran	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Diethyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Dimethyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2,4-Dichlorophenol	ND	20		µg/L	1	10/12/2012 12:06:49 AM
2,4-Dimethylphenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/12/2012 12:06:49 AM
2,4-Dinitrophenol	ND	20		µg/L	1	10/12/2012 12:06:49 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Fluoranthene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Fluorene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Hexachlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Hexachlorobutadiene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Hexachloroethane	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Isophorone	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 12:06:49 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100412
Project: SWMU NO.1
Collection Date: 10/4/2012 5:25:00 PM
Lab ID: 1210372-024
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
3+4-Methylphenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Naphthalene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
3-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Nitrobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Nitrophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Nitrophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Pentachlorophenol	ND	20		µg/L	1	10/12/2012 12:06:49 AM
Phenanthrene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Phenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Pyrene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Pyridine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Surr: 2,4,6-Tribromophenol	77.9	44.2-126		%REC	1	10/12/2012 12:06:49 AM
Surr: 2-Fluorobiphenyl	65.9	37-114		%REC	1	10/12/2012 12:06:49 AM
Surr: 2-Fluorophenol	60.2	23.4-98		%REC	1	10/12/2012 12:06:49 AM
Surr: 4-Terphenyl-d14	59.6	41.3-116		%REC	1	10/12/2012 12:06:49 AM
Surr: Nitrobenzene-d5	78.4	39.5-118		%REC	1	10/12/2012 12:06:49 AM
Surr: Phenol-d5	44.1	20.9-95.9		%REC	1	10/12/2012 12:06:49 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Toluene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Ethylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Naphthalene	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 6:35:06 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 6:35:06 PM
Acetone	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100412
Project: SWMU NO.1
Collection Date: 10/4/2012 5:25:00 PM
Lab ID: 1210372-024
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Bromoform	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 6:35:06 PM
2-Butanone	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 6:35:06 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
2-Hexanone	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 6:35:06 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 6:35:06 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100412
Project: SWMU NO.1
Collection Date: 10/4/2012 5:25:00 PM
Lab ID: 1210372-024
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Xylenes, Total	ND	1.5		µg/L	1	10/9/2012 6:35:06 PM
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%REC	1	10/9/2012 6:35:06 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	1	10/9/2012 6:35:06 PM
Surr: Dibromofluoromethane	99.8	70-130		%REC	1	10/9/2012 6:35:06 PM
Surr: Toluene-d8	95.5	70-130		%REC	1	10/9/2012 6:35:06 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210372-025
Matrix: TRIP BLANK
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Toluene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Ethylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Naphthalene	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 7:03:23 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 7:03:23 PM
Acetone	ND	10		µg/L	1	10/9/2012 7:03:23 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Bromoform	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 7:03:23 PM
2-Butanone	ND	10		µg/L	1	10/9/2012 7:03:23 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 7:03:23 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 7:03:23 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
2-Hexanone	ND	10		µg/L	1	10/9/2012 7:03:23 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210372-025
Matrix: TRIP BLANK
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Isopropylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/9/2012 7:03:23 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 7:03:23 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 7:03:23 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Xylenes, Total	ND	1.5		µg/L	1	10/9/2012 7:03:23 PM
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	1	10/9/2012 7:03:23 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	1	10/9/2012 7:03:23 PM
Surr: Dibromofluoromethane	97.8	70-130		%REC	1	10/9/2012 7:03:23 PM
Surr: Toluene-d8	93.9	70-130		%REC	1	10/9/2012 7:03:23 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 9:25:00 AM
Lab ID: 1210372-026
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	4.4	1.0		mg/L	1	10/8/2012 7:30:15 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 7:30:15 PM
Surr: DNOP	122	79.5-166		%REC	1	10/8/2012 7:30:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.73	0.050		mg/L	1	10/10/2012 7:47:14 PM
Surr: BFB	145	69.8-119	S	%REC	1	10/10/2012 7:47:14 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Acenaphthylene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Aniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Anthracene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Azobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benz(a)anthracene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzo(a)pyrene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzoic acid	ND	20		µg/L	1	10/12/2012 12:36:10 AM
Benzyl alcohol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Butyl benzyl phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Carbazole	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Chloroaniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Chloronaphthalene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Chlorophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Chrysene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Di-n-butyl phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Di-n-octyl phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Dibenzofuran	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Diethyl phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 9:25:00 AM
Lab ID: 1210372-026
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Dimethyl phthalate	10	10		µg/L	1	10/12/2012 12:36:10 AM
2,4-Dichlorophenol	ND	20		µg/L	1	10/12/2012 12:36:10 AM
2,4-Dimethylphenol	850	50		µg/L	5	10/12/2012 10:37:56 AM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/12/2012 12:36:10 AM
2,4-Dinitrophenol	ND	20		µg/L	1	10/12/2012 12:36:10 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Fluoranthene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Fluorene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Hexachlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Hexachlorobutadiene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Hexachloroethane	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Isophorone	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Methylphenol	18	10		µg/L	1	10/12/2012 12:36:10 AM
3+4-Methylphenol	18	10		µg/L	1	10/12/2012 12:36:10 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Naphthalene	16	10		µg/L	1	10/12/2012 12:36:10 AM
2-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
3-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Nitrobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Nitrophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Nitrophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Pentachlorophenol	ND	20		µg/L	1	10/12/2012 12:36:10 AM
Phenanthrene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Phenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Pyrene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Pyridine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Surr: 2,4,6-Tribromophenol	76.9	44.2-126		%REC	1	10/12/2012 12:36:10 AM
Surr: 2-Fluorobiphenyl	67.2	37-114		%REC	1	10/12/2012 12:36:10 AM
Surr: 2-Fluorophenol	53.6	23.4-98		%REC	1	10/12/2012 12:36:10 AM
Surr: 4-Terphenyl-d14	65.1	41.3-116		%REC	1	10/12/2012 12:36:10 AM
Surr: Nitrobenzene-d5	76.1	39.5-118		%REC	1	10/12/2012 12:36:10 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 9:25:00 AM
Lab ID: 1210372-026
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Surr: Phenol-d5	44.4	20.9-95.9		%REC	1	10/12/2012 12:36:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	24	1.0		µg/L	1	10/9/2012 7:31:32 PM
Toluene	16	1.0		µg/L	1	10/9/2012 7:31:32 PM
Ethylbenzene	16	1.0		µg/L	1	10/9/2012 7:31:32 PM
Methyl tert-butyl ether (MTBE)	59	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2,4-Trimethylbenzene	32	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,3,5-Trimethylbenzene	8.0	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Naphthalene	32	2.0		µg/L	1	10/9/2012 7:31:32 PM
1-Methylnaphthalene	11	4.0		µg/L	1	10/9/2012 7:31:32 PM
2-Methylnaphthalene	19	4.0		µg/L	1	10/9/2012 7:31:32 PM
Acetone	130	10		µg/L	1	10/9/2012 7:31:32 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Bromoform	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 7:31:32 PM
2-Butanone	47	10		µg/L	1	10/9/2012 7:31:32 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 7:31:32 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 7:31:32 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-4 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 9:25:00 AM
Lab ID: 1210372-026
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
2-Hexanone	16	10		µg/L	1	10/9/2012 7:31:32 PM
Isopropylbenzene	1.5	1.0		µg/L	1	10/9/2012 7:31:32 PM
4-Isopropyltoluene	1.5	1.0		µg/L	1	10/9/2012 7:31:32 PM
4-Methyl-2-pentanone	15	10		µg/L	1	10/9/2012 7:31:32 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 7:31:32 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 7:31:32 PM
n-Propylbenzene	2.7	1.0		µg/L	1	10/9/2012 7:31:32 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Xylenes, Total	100	1.5		µg/L	1	10/9/2012 7:31:32 PM
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	10/9/2012 7:31:32 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/9/2012 7:31:32 PM
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	10/9/2012 7:31:32 PM
Surr: Toluene-d8	94.3	70-130		%REC	1	10/9/2012 7:31:32 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:05:00 PM
Lab ID: 1210372-027
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	1.3	1.0		mg/L	1	10/8/2012 7:55:40 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 7:55:40 PM
Surr: DNOP	127	79.5-166		%REC	1	10/8/2012 7:55:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.13	0.050		mg/L	1	10/10/2012 8:17:32 PM
Surr: BFB	107	69.8-119		%REC	1	10/10/2012 8:17:32 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	8.8	0.50	*	mg/L	5	10/17/2012 9:44:56 PM
Chloride	1200	50		mg/L	100	10/11/2012 10:27:13 PM
Sulfate	1800	50		mg/L	100	10/11/2012 4:37:15 AM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	3.4	0.020	*	mg/L	5	10/10/2012 7:04:21 PM
Beryllium	0.041	0.020	*	mg/L	5	10/10/2012 7:04:21 PM
Cadmium	ND	0.020		mg/L	5	10/10/2012 7:04:21 PM
Chromium	0.16	0.060	*	mg/L	5	10/12/2012 8:33:04 AM
Cobalt	0.27	0.060		mg/L	5	10/10/2012 7:04:21 PM
Iron	94	2.0	*	mg/L	50	10/12/2012 8:36:20 AM
Manganese	39	0.20	*	mg/L	50	10/12/2012 8:36:20 AM
Nickel	0.55	0.10	*	mg/L	5	10/10/2012 7:04:21 PM
Silver	ND	0.050		mg/L	5	10/10/2012 7:04:21 PM
Vanadium	ND	0.50		mg/L	5	10/10/2012 7:04:21 PM
Zinc	0.88	0.10		mg/L	5	10/12/2012 8:33:04 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0050		mg/L	2.5	10/15/2012 5:14:52 PM
Arsenic	0.054	0.0050	*	mg/L	2.5	10/15/2012 5:14:52 PM
Lead	0.29	0.010	*	mg/L	5	10/16/2012 3:28:37 PM
Selenium	0.024	0.0050		mg/L	2.5	10/15/2012 5:14:52 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	0.00021	0.00020		mg/L	1	10/12/2012 4:57:39 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Acenaphthylene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Aniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Anthracene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Azobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benz(a)anthracene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benzo(a)pyrene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benzo(b)fluoranthene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benzo(g,h,i)perylene	ND	20		µg/L	2	10/12/2012 11:07:17 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:05:00 PM
Lab ID: 1210372-027
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benzoic acid	ND	40		µg/L	2	10/12/2012 11:07:17 AM
Benzyl alcohol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Bis(2-chloroethoxy)methane	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Bis(2-chloroethyl)ether	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Bis(2-chloroisopropyl)ether	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Bis(2-ethylhexyl)phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Bromophenyl phenyl ether	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Butyl benzyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Carbazole	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Chloro-3-methylphenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Chloroaniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Chloronaphthalene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Chlorophenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Chlorophenyl phenyl ether	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Chrysene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Di-n-butyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Di-n-octyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Dibenz(a,h)anthracene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Dibenzofuran	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1,2-Dichlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1,3-Dichlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1,4-Dichlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
3,3´-Dichlorobenzidine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Diethyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Dimethyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2,4-Dichlorophenol	ND	40		µg/L	2	10/12/2012 11:07:17 AM
2,4-Dimethylphenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4,6-Dinitro-2-methylphenol	ND	40		µg/L	2	10/12/2012 11:07:17 AM
2,4-Dinitrophenol	ND	40		µg/L	2	10/12/2012 11:07:17 AM
2,4-Dinitrotoluene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2,6-Dinitrotoluene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Fluoranthene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Fluorene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Hexachlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Hexachlorobutadiene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Hexachlorocyclopentadiene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Hexachloroethane	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Indeno(1,2,3-cd)pyrene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Isophorone	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1-Methylnaphthalene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Methylnaphthalene	ND	20		µg/L	2	10/12/2012 11:07:17 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:05:00 PM
Lab ID: 1210372-027
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
3+4-Methylphenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
N-Nitrosodi-n-propylamine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
N-Nitrosodimethylamine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
N-Nitrosodiphenylamine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Naphthalene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Nitroaniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
3-Nitroaniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Nitroaniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Nitrobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Nitrophenol	240	20		µg/L	2	10/12/2012 11:07:17 AM
4-Nitrophenol	26	20		µg/L	2	10/12/2012 11:07:17 AM
Pentachlorophenol	ND	40		µg/L	2	10/12/2012 11:07:17 AM
Phenanthrene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Phenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Pyrene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Pyridine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1,2,4-Trichlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2,4,5-Trichlorophenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2,4,6-Trichlorophenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Surr: 2,4,6-Tribromophenol	50.7	44.2-126		%REC	2	10/12/2012 11:07:17 AM
Surr: 2-Fluorobiphenyl	79.4	37-114		%REC	2	10/12/2012 11:07:17 AM
Surr: 2-Fluorophenol	36.6	23.4-98		%REC	2	10/12/2012 11:07:17 AM
Surr: 4-Terphenyl-d14	78.4	41.3-116		%REC	2	10/12/2012 11:07:17 AM
Surr: Nitrobenzene-d5	89.5	39.5-118		%REC	2	10/12/2012 11:07:17 AM
Surr: Phenol-d5	29.6	20.9-95.9		%REC	2	10/12/2012 11:07:17 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Toluene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Ethylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Naphthalene	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2012 3:38:56 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2012 3:38:56 PM
Acetone	270	50		µg/L	5	10/9/2012 7:59:33 PM
Bromobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:05:00 PM
Lab ID: 1210372-027
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Bromoform	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Bromomethane	3.0	3.0		µg/L	1	10/10/2012 3:38:56 PM
2-Butanone	26	10		µg/L	1	10/10/2012 3:38:56 PM
Carbon disulfide	30	10		µg/L	1	10/10/2012 3:38:56 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Chlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Chloroethane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
Chloroform	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Chloromethane	3.5	3.0		µg/L	1	10/10/2012 3:38:56 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Dibromomethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
2-Hexanone	ND	10		µg/L	1	10/10/2012 3:38:56 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
4-Isopropyltoluene	1.2	1.0		µg/L	1	10/10/2012 3:38:56 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/10/2012 3:38:56 PM
Methylene Chloride	ND	3.0		µg/L	1	10/10/2012 3:38:56 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/10/2012 3:38:56 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Styrene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-6 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:05:00 PM
Lab ID: 1210372-027
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
Vinyl chloride	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Xylenes, Total	ND	1.5		µg/L	1	10/10/2012 3:38:56 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	10/10/2012 3:38:56 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/10/2012 3:38:56 PM
Surr: Dibromofluoromethane	94.6	70-130		%REC	1	10/10/2012 3:38:56 PM
Surr: Toluene-d8	94.1	70-130		%REC	1	10/10/2012 3:38:56 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:55:00 PM
Lab ID: 1210372-028
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/8/2012 8:21:01 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 8:21:01 PM
Surr: DNOP	125	79.5-166		%REC	1	10/8/2012 8:21:01 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.22	0.10		mg/L	2	10/10/2012 8:47:37 PM
Surr: BFB	93.6	69.8-119		%REC	2	10/10/2012 8:47:37 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	1.1	0.50		mg/L	5	10/17/2012 9:57:20 PM
Chloride	1800	100		mg/L	200	10/11/2012 10:39:38 PM
Sulfate	2200	25		mg/L	50	10/11/2012 5:26:54 AM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	3.2	0.020	*	mg/L	5	10/10/2012 7:11:01 PM
Beryllium	0.051	0.020	*	mg/L	5	10/10/2012 7:11:01 PM
Cadmium	ND	0.020		mg/L	5	10/10/2012 7:11:01 PM
Chromium	0.17	0.060	*	mg/L	5	10/12/2012 8:40:08 AM
Cobalt	0.16	0.060		mg/L	5	10/10/2012 7:11:01 PM
Iron	130	4.0	*	mg/L	100	10/12/2012 10:09:47 AM
Manganese	33	0.20	*	mg/L	50	10/12/2012 8:43:25 AM
Nickel	0.46	0.10	*	mg/L	5	10/10/2012 7:11:01 PM
Silver	ND	0.050		mg/L	5	10/10/2012 7:11:01 PM
Vanadium	ND	0.50		mg/L	5	10/10/2012 7:11:01 PM
Zinc	0.42	0.10		mg/L	5	10/12/2012 8:40:08 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0050		mg/L	2.5	10/15/2012 5:18:48 PM
Arsenic	0.046	0.0050	*	mg/L	2.5	10/15/2012 5:18:48 PM
Lead	0.34	0.010	*	mg/L	5	10/16/2012 3:40:27 PM
Selenium	0.022	0.0050		mg/L	2.5	10/15/2012 5:18:48 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	0.00034	0.00020		mg/L	1	10/12/2012 4:59:25 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Acenaphthylene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Aniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Anthracene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Azobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benz(a)anthracene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benzo(a)pyrene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/12/2012 1:34:52 AM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: SWMU 1-7 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:55:00 PM
Lab ID: 1210372-028
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(k)fluoranthene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benzoic acid	ND	20		µg/L	1	10/12/2012 1:34:52 AM
Benzyl alcohol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Butyl benzyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Carbazole	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Chloroaniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Chloronaphthalene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Chlorophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Chrysene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Di-n-butyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Di-n-octyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Dibenzofuran	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Diethyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Dimethyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2,4-Dichlorophenol	ND	20		µg/L	1	10/12/2012 1:34:52 AM
2,4-Dimethylphenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/12/2012 1:34:52 AM
2,4-Dinitrophenol	ND	20		µg/L	1	10/12/2012 1:34:52 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Fluoranthene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Fluorene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Hexachlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Hexachlorobutadiene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Hexachloroethane	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Isophorone	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 1:34:52 AM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:55:00 PM
Lab ID: 1210372-028
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Methylphenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
3+4-Methylphenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Naphthalene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Nitroaniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
3-Nitroaniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Nitroaniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Nitrobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Nitrophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Nitrophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Pentachlorophenol	ND	20		µg/L	1	10/12/2012 1:34:52 AM
Phenanthrene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Phenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Pyrene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Pyridine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Surr: 2,4,6-Tribromophenol	80.3	44.2-126		%REC	1	10/12/2012 1:34:52 AM
Surr: 2-Fluorobiphenyl	78.3	37-114		%REC	1	10/12/2012 1:34:52 AM
Surr: 2-Fluorophenol	55.5	23.4-98		%REC	1	10/12/2012 1:34:52 AM
Surr: 4-Terphenyl-d14	91.4	41.3-116		%REC	1	10/12/2012 1:34:52 AM
Surr: Nitrobenzene-d5	82.7	39.5-118		%REC	1	10/12/2012 1:34:52 AM
Surr: Phenol-d5	32.0	20.9-95.9		%REC	1	10/12/2012 1:34:52 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Toluene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Ethylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Methyl tert-butyl ether (MTBE)	14	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Naphthalene	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
1-Methylnaphthalene	ND	8.0		µg/L	2	10/9/2012 8:27:45 PM
2-Methylnaphthalene	ND	8.0		µg/L	2	10/9/2012 8:27:45 PM
Acetone	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Bromobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Bromodichloromethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-7 GW
Project: SWMU NO.1
Collection Date: 10/4/2012 4:55:00 PM
Lab ID: 1210372-028
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Bromoform	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Bromomethane	ND	6.0		µg/L	2	10/9/2012 8:27:45 PM
2-Butanone	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Carbon disulfide	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Carbon Tetrachloride	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Chlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Chloroethane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
Chloroform	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Chloromethane	ND	6.0		µg/L	2	10/9/2012 8:27:45 PM
2-Chlorotoluene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
4-Chlorotoluene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
cis-1,2-DCE	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
Dibromochloromethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Dibromomethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Dichlorodifluoromethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1-Dichloroethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1-Dichloroethene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dichloropropane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,3-Dichloropropane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
2,2-Dichloropropane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
1,1-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Hexachlorobutadiene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
2-Hexanone	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Isopropylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
4-Isopropyltoluene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
4-Methyl-2-pentanone	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Methylene Chloride	ND	6.0		µg/L	2	10/9/2012 8:27:45 PM
n-Butylbenzene	ND	6.0		µg/L	2	10/9/2012 8:27:45 PM
n-Propylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
sec-Butylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Styrene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
tert-Butylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
trans-1,2-DCE	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM

Qualifiers:

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Lab ID: 1210372-028
Matrix: AQUEOUS
Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Trichloroethene (TCE)	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Trichlorofluoromethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
Vinyl chloride	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Xylenes, Total	ND	3.0		µg/L	2	10/9/2012 8:27:45 PM
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%REC	2	10/9/2012 8:27:45 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	2	10/9/2012 8:27:45 PM
Surr: Dibromofluoromethane	99.8	70-130		%REC	2	10/9/2012 8:27:45 PM
Surr: Toluene-d8	93.7	70-130		%REC	2	10/9/2012 8:27:45 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

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

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number 121009050-001 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-001D / SWMU 1-1 (2-4) **Sampling Time** 2:10 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.26	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	15.9	Percent				%moisture	

Sample Number 121009050-002 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-002B / SWMU 1-1 (10-12) **Sampling Time** 2:15 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	16.9	Percent				%moisture	

Sample Number 121009050-003 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-003C / SWMU 1-1 (13-14) **Sampling Time** 2:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	10.5	Percent				%moisture	

Sample Number 121009050-004 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-004D / SWMU 1-8 (16-18)DUP **Sampling Time** 11:10 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	12.4	Percent				%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number 121009050-005 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-005D / SWMU 1-8 (19-20) **Sampling Time** 11:25 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	12.7	Percent				%moisture	

Sample Number 121009050-006 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-006D / SWMU 1-8 (4-6) **Sampling Time** 10:20 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	14.5	Percent				%moisture	

Sample Number 121009050-007 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-007D / SWMU 1-8 (10-12) **Sampling Time** 10:30 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.612	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	6.5	Percent				%moisture	

Sample Number 121009050-008 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-008E / SWMU 1-8 (12-14) **Sampling Time** 10:40 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.395	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	14.9	Percent				%moisture	

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number 121009050-009 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-009D / SWMU 1-8 (16-18) **Sampling Time** 11:10 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	12.6	Percent				%moisture	

Sample Number 121009050-010 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-010F / EB100512 **Sampling Time** 5:40 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number 121009050-011 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-012B / SWMU 1-4 GW **Sampling Time** 7:45 AM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0211	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number 121009050-012 **Sampling Date** 10/5/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-014F / SWMU 1-8 GW **Sampling Time** 4:05 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0180	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number 121009050-013 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-015D / SWMU 1-7 (16-18) **Sampling Time** 4:40 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	15.5	Percent				%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number 121009050-014 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-016D / SWMU 1-6 (10-11) **Sampling Time** 11:45 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	16.2	Percent				%moisture	

Sample Number 121009050-015 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-017D / SWMU 1-6 (11-12) **Sampling Time** 11:55 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	14.6	Percent				%moisture	

Sample Number 121009050-016 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-018D / SWMU 1-7 (12-14) **Sampling Time** 1:55 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	16.1	Percent				%moisture	

Sample Number 121009050-017 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-019D / SWMU 1-7 (14-16) **Sampling Time** 2:15 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	21.8	Percent				%moisture	

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number 121009050-018 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-020C / SWMU 1-6 (2-4) **Sampling Time** 10:55 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	3.2	Percent				%moisture	

Sample Number 121009050-019 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-021C / SWMU 1-6 (2-4) DUP **Sampling Time** 10:55 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	2.8	Percent				%moisture	

Sample Number 121009050-020 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-022D / SWMU 1-6 (4-6) **Sampling Time** 11:15 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	15.2	Percent				%moisture	

Sample Number 121009050-021 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-023D / SWMU 1-6 (7.5-8) **Sampling Time** 11:30 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	22.1	Percent				%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number 121009050-022 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-024F / EB100412 **Sampling Time** 5:25 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number 121009050-023 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-027E / SWMU 1-6 GW **Sampling Time** 4:05 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0282	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number 121009050-024 **Sampling Date** 10/4/2012 **Date/Time Received** 10/9/2012 12:24 PM
Client Sample ID 1210372-028E / SWMU 1-7 GW **Sampling Time** 4:55 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0515	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

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

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **176939** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **176940** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.6	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.50	0.0020	0.5000	0	100	85	115			
Chromium	0.49	0.0060	0.5000	0	97.3	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.2	85	115			
Iron	0.49	0.020	0.5000	0	98.1	85	115			
Manganese	0.49	0.0020	0.5000	0	97.7	85	115			
Nickel	0.47	0.010	0.5000	0	94.9	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			

Sample ID **1210368-001BMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177005** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0.02430	96.8	70	130			
Beryllium	0.51	0.0020	0.5000	0	102	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.8	70	130			

Sample ID **1210368-001BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177006** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0.02430	97.1	70	130	0.302	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210368-001BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6141** RunNo: **6141**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177006** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.52	0.0020	0.5000	0	103	70	130	0.724	20	
Cadmium	0.50	0.0020	0.5000	0	99.0	70	130	1.24	20	

Sample ID **MB-4223** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4223** RunNo: **6141**
Prep Date: **10/10/2012** Analysis Date: **10/10/2012** SeqNo: **177028** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS-4223** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **4223** RunNo: **6141**
Prep Date: **10/10/2012** Analysis Date: **10/10/2012** SeqNo: **177029** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	99.0	85	115			
Beryllium	0.52	0.0020	0.5000	0	104	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	98.2	85	115			
Cobalt	0.49	0.0060	0.5000	0	97.1	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	98.3	85	115			
Nickel	0.48	0.010	0.5000	0	96.2	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Vanadium	0.51	0.050	0.5000	0	102	85	115			
Zinc	0.49	0.010	0.5000	0	97.9	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178907** Units: **mg/L**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA Method 200.7: Metals**				
Client ID:	**PBW**	Batch ID:	**R6212**		RunNo:	**6212**				
Prep Date:		Analysis Date:	**10/12/2012**		SeqNo:	**178907**	Units:	**mg/L**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc		ND	0.010								

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA Method 200.7: Metals**				
Client ID:	**LCSW**	Batch ID:	**R6212**		RunNo:	**6212**				
Prep Date:		Analysis Date:	**10/12/2012**		SeqNo:	**178908**	Units:	**mg/L**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc		0.51	0.010	0.5000	0	101	85	115			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4223** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **4223** RunNo: **6249**
Prep Date: **10/10/2012** Analysis Date: **10/15/2012** SeqNo: **179959** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								
Selenium	ND	0.0025								

Sample ID **1210046-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181878** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.027	0.0010	0.02500	0.001891	99.5	70	130			

Sample ID **1210367-001BMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181885** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.6	70	130			
Arsenic	0.035	0.0010	0.02500	0.01018	101	70	130			
Selenium	0.031	0.0010	0.02500	0.005490	104	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181905** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.9	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181906** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.6	85	115			
Selenium	0.027	0.0010	0.02500	0	106	85	115			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181907** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.7	85	115			
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181909** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181910** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181911** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1210585-001CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181948** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	70	130			
Arsenic	0.026	0.0010	0.02500	0	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210585-001CMS**	SampType:	**MS**	TestCode:	**EPA 200.8: Metals**
Client ID:	**BatchQC**	Batch ID:	**R6315**	RunNo:	**6315**
Prep Date:		Analysis Date:	**10/17/2012**	SeqNo:	**181948** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.025	0.0010	0.02500	0	99.7	70	130			
Selenium	0.026	0.0010	0.02500	0	105	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4279** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179065** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-4279** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179066** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.0	80	120			

Sample ID **1210332-010EMS** SampType: **MS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179069** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.9	75	125			

Sample ID **1210332-010EMSD** SampType: **MSD** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4279** RunNo: **6215**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179072** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.7	75	125	0.749	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6070** RunNo: **6070**
Prep Date: Analysis Date: **10/8/2012** SeqNo: **175019** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6070** RunNo: **6070**
Prep Date: Analysis Date: **10/8/2012** SeqNo: **175020** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.3	90	110			
Sulfate	9.3	0.50	10.00	0	93.4	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177358** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177359** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.52	0.10	0.5000	0	103	90	110			
Sulfate	10	0.50	10.00	0	99.9	90	110			

Sample ID **1210304-001AMS10** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177370** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	6.02	1.00	5.000	1.010	100	76.6	110			
Sulfate	442	5.00	100.0	337.1	105	84.6	122			

Sample ID **1210304-001AMSD1** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177371** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	5.89	1.00	5.000	1.010	97.6	76.6	110	2.08	20	
Sulfate	433	5.00	100.0	337.1	95.7	84.6	122	2.08	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210527-001AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177384** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.0	0.10	0.5000	0.5805	92.9	76.6	110			

Sample ID **1210527-001AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177385** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.5805	95.6	76.6	110	1.28	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177422** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177423** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.53	0.10	0.5000	0	106	90	110			
Sulfate	9.9	0.50	10.00	0	99.3	90	110			

Sample ID **1210550-001DMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177425** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.4517	137	76.6	110			S

Sample ID **1210550-001DMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6156** RunNo: **6156**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177426** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.4517	132	76.6	110	2.25	20	S

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6177** RunNo: **6177**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178038** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6177** RunNo: **6177**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178039** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.2	90	110			

Sample ID **1210607-001AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6177** RunNo: **6177**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178041** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.5	0.50	5.000	4.628	97.8	87.8	111			

Sample ID **1210607-001AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6177** RunNo: **6177**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178042** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.6	0.50	5.000	4.628	98.5	87.8	111	0.323	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6330** RunNo: **6330**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182236** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6330** RunNo: **6330**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182237** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	96.6	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4180**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**4180**	RunNo:	**6071**					
Prep Date:	**10/8/2012**	Analysis Date:	**10/9/2012**	SeqNo:	**175091**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		107	77.6	140			

Sample ID	**LCS-4180**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**4180**	RunNo:	**6071**					
Prep Date:	**10/8/2012**	Analysis Date:	**10/9/2012**	SeqNo:	**175092**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	32	10	50.00	0	64.7	52.6	130			
Surr: DNOP	5.1		5.000		101	77.6	140			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4170** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **PBW** Batch ID: **4170** RunNo: **6037**
Prep Date: **10/8/2012** Analysis Date: **10/8/2012** SeqNo: **174724** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		113	79.5	166			

Sample ID **LCS-4170** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSW** Batch ID: **4170** RunNo: **6037**
Prep Date: **10/8/2012** Analysis Date: **10/8/2012** SeqNo: **174725** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.1	74	157			
Surr: DNOP	0.50		0.5000		101	79.5	166			

Sample ID **LCSD-4170** SampType: **LCSD** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSS02** Batch ID: **4170** RunNo: **6037**
Prep Date: **10/8/2012** Analysis Date: **10/8/2012** SeqNo: **174726** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.0	1.0	5.000	0	80.9	74	157	7.55	23	
Surr: DNOP	0.52		0.5000		103	79.5	166	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6073** RunNo: **6073**
Prep Date: Analysis Date: **10/8/2012** SeqNo: **175096** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6073** RunNo: **6073**
Prep Date: Analysis Date: **10/8/2012** SeqNo: **175097** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.0	74	117			
Surr: BFB	1100		1000		106	84	116			

Sample ID **MB-4212** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4212** RunNo: **6152**
Prep Date: **10/9/2012** Analysis Date: **10/10/2012** SeqNo: **177240** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		105	84	116			

Sample ID **LCS-4212** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4212** RunNo: **6152**
Prep Date: **10/9/2012** Analysis Date: **10/10/2012** SeqNo: **177241** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID **1210474-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4212** RunNo: **6152**
Prep Date: **10/9/2012** Analysis Date: **10/10/2012** SeqNo: **177245** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	71	24	24.34	43.50	114	70	130			
Surr: BFB	5400		4869		112	84	116			

Sample ID **1210474-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4212** RunNo: **6152**
Prep Date: **10/9/2012** Analysis Date: **10/10/2012** SeqNo: **177246** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	78	24	24.18	43.50	145	70	130	9.76	22.1	S
Surr: BFB	5300		4836		110	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW**	Batch ID: **R6154**	RunNo: **6154**
Prep Date:	Analysis Date: **10/10/2012**	SeqNo: **177292** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	22		20.00		110	69.8	119			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW**	Batch ID: **R6154**	RunNo: **6154**
Prep Date:	Analysis Date: **10/10/2012**	SeqNo: **177314** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.48	0.050	0.5000	0	95.6	75.9	119			
Surr: BFB	24		20.00		118	69.8	119			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW**	Batch ID: **R6187**	RunNo: **6187**
Prep Date:	Analysis Date: **10/11/2012**	SeqNo: **178251** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.5	69.8	119			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW**	Batch ID: **R6187**	RunNo: **6187**
Prep Date:	Analysis Date: **10/11/2012**	SeqNo: **178252** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	91.8	75.9	119			
Surr: BFB	20		20.00		97.8	69.8	119			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4203**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4203**	RunNo: **6147**			
Prep Date: **10/9/2012**	Analysis Date: **10/9/2012**	SeqNo: **177089**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4203** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4203** RunNo: **6147**
Prep Date: **10/9/2012** Analysis Date: **10/9/2012** SeqNo: **177089** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.0		50.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	46.4		50.00		92.9	70	130			
Surr: Dibromofluoromethane	49.1		50.00		98.2	70	130			
Surr: Toluene-d8	50.9		50.00		102	70	130			

Sample ID **lcs-4203** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4203** RunNo: **6147**
Prep Date: **10/9/2012** Analysis Date: **10/9/2012** SeqNo: **177092** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12.6	1.00	12.50	0	101	60	140			
Toluene	10.8	1.00	12.50	0	86.5	60	140			
Chlorobenzene	12.3	1.00	12.50	0	98.5	60	140			
1,1-Dichloroethene	12.9	1.00	12.50	0	103	60	140			
Trichloroethene (TCE)	12.0	1.00	12.50	0	95.8	60	140			
Surr: 1,2-Dichloroethane-d4	44.0		50.00		88.0	70	130			
Surr: 4-Bromofluorobenzene	48.2		50.00		96.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4203** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4203** RunNo: **6147**
Prep Date: **10/9/2012** Analysis Date: **10/9/2012** SeqNo: **177092** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	48.2		50.00		96.3	70	130			
Surr: Toluene-d8	43.7		50.00		87.4	70	130			

Sample ID **MB-4229** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4229** RunNo: **6153**
Prep Date: **10/10/2012** Analysis Date: **10/10/2012** SeqNo: **177265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4229**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4229**	RunNo: **6153**			
Prep Date: **10/10/2012**	Analysis Date: **10/10/2012**	SeqNo: **177265**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.5		50.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	48.6		50.00		97.2	70	130			
Surr: Dibromofluoromethane	50.8		50.00		102	70	130			
Surr: Toluene-d8	44.6		50.00		89.3	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS-4229**	SampType: **LCS**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **LCSS**	Batch ID: **4229**	RunNo: **6153**			
Prep Date: **10/10/2012**	Analysis Date: **10/10/2012**	SeqNo: **177267**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.19	1.00	8.000	0	102	60	140			
Toluene	8.34	1.00	8.000	0	104	60	140			
Chlorobenzene	8.45	1.00	8.000	0	106	60	140			
1,1-Dichloroethene	9.31	1.00	8.000	0	116	60	140			
Trichloroethene (TCE)	6.81	1.00	8.000	0	85.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.6		50.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	45.3		50.00		90.5	70	130			
Surr: Dibromofluoromethane	51.1		50.00		102	70	130			
Surr: Toluene-d8	51.1		50.00		102	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6105**	RunNo: **6105**			
Prep Date:	Analysis Date: **10/9/2012**	SeqNo: **175988**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R6105**	RunNo: **6105**
Prep Date:	Analysis Date: **10/9/2012**	SeqNo: **175988** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.8	70	130			
Surr: Toluene-d8	9.8		10.00		97.7	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R6105**	RunNo: **6105**
Prep Date:	Analysis Date: **10/9/2012**	SeqNo: **175990** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	116	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	73.7	122			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6105** RunNo: **6105**
Prep Date: Analysis Date: **10/9/2012** SeqNo: **175990** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.6		10.00		95.8	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	70	130			

Sample ID **1210372-010ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EB100512** Batch ID: **R6105** RunNo: **6105**
Prep Date: Analysis Date: **10/9/2012** SeqNo: **175992** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	114	66.8	128			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	22	1.0	20.00	0	109	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	107	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	97.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.1	70	130			
Surr: Toluene-d8	9.5		10.00		94.8	70	130			

Sample ID **1210372-010amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EB100512** Batch ID: **R6105** RunNo: **6105**
Prep Date: Analysis Date: **10/9/2012** SeqNo: **175993** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	66.8	128	5.11	16.7	
Toluene	22	1.0	20.00	0	108	70	130	1.42	18.7	
Chlorobenzene	22	1.0	20.00	0	108	70	130	0.698	19.5	
1,1-Dichloroethene	19	1.0	20.00	0	95.6	70	130	11.7	16.7	
Trichloroethene (TCE)	18	1.0	20.00	0	92.4	70	130	4.97	17.5	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.5		10.00		95.4	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		93.0	70	130	0	0	
Surr: Toluene-d8	9.8		10.00		98.2	70	130	0	0	

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6155** RunNo: **6155**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177325** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R6155**	RunNo: **6155**	
Prep Date:	Analysis Date: **10/10/2012**	SeqNo: **177325**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6155** RunNo: **6155**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177325** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.2	70	130			
Surr: Toluene-d8	9.5		10.00		94.7	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6155** RunNo: **6155**
Prep Date: Analysis Date: **10/10/2012** SeqNo: **177328** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.9	70	130			
Toluene	19	1.0	20.00	0	93.4	80	120			
Chlorobenzene	19	1.0	20.00	0	94.5	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.9	73.7	122			
Trichloroethene (TCE)	17	1.0	20.00	0	84.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.2	70	130			
Surr: Toluene-d8	9.5		10.00		94.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6255**	RunNo: **6255**			
Prep Date:	Analysis Date: **10/15/2012**	SeqNo: **180303**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6255** RunNo: **6255**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180303** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6255** RunNo: **6255**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180305** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	92.3	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	92.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.2	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R6255**	RunNo: **6255**			
Prep Date:	Analysis Date: **10/15/2012**	SeqNo: **180305**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.0		10.00		90.3	70	130			
Surr: Toluene-d8	9.4		10.00		93.9	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4168**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4168**	RunNo: **6106**			
Prep Date: **10/8/2012**	Analysis Date: **10/10/2012**	SeqNo: **176042**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4168** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **176042** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.8		3.330		84.5	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		88.5	20	131			
Surr: 2-Fluorophenol	2.9		3.330		85.8	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		77.1	25.1	149			
Surr: Nitrobenzene-d5	1.5		1.670		90.5	25.6	137			
Surr: Phenol-d5	3.1		3.330		94.0	20.3	132			

Sample ID **lcs-4168** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **176043** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4168** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **176043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.20	1.670	0	77.2	49.7	98.1			
4-Chloro-3-methylphenol	2.9	0.50	3.330	0	87.8	43.8	89.1			
2-Chlorophenol	2.8	0.20	3.330	0	83.6	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	75.1	41	97.4			
2,4-Dinitrotoluene	1.7	0.50	1.670	0	99.6	44.4	104			
N-Nitrosodi-n-propylamine	1.5	0.20	1.670	0	88.3	39.1	86.9			S
4-Nitrophenol	3.0	0.25	3.330	0	88.8	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	64.1	36.2	80			
Phenol	2.7	0.20	3.330	0	80.3	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	74.5	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	77.2	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.4	21.3	145			
Surr: 2-Fluorobiphenyl	1.4		1.670		85.7	20	131			
Surr: 2-Fluorophenol	2.6		3.330		77.1	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		74.9	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		82.0	25.6	137			
Surr: Phenol-d5	2.8		3.330		83.8	20.3	132			

Sample ID **1210372-001BMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-1 (2-4')** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **177069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	2.1	1.0	1.673	0	127	38.6	100			S
4-Chloro-3-methylphenol	2.5	2.5	3.336	0	75.3	35.8	108			
2-Chlorophenol	2.2	1.0	3.336	0	65.8	48.2	96.1			
1,4-Dichlorobenzene	ND	1.0	1.673	0	57.2	42.5	97.6			
2,4-Dinitrotoluene	ND	2.5	1.673	0	65.9	51.2	108			
N-Nitrosodi-n-propylamine	ND	1.0	1.673	0	0	31.6	114			S
4-Nitrophenol	ND	1.3	3.336	0	0	22.7	144			S
Pentachlorophenol	ND	2.0	3.336	0	53.4	24	109			
Phenol	2.0	1.0	3.336	0	61.3	33.1	108			
Pyrene	1.7	1.0	1.673	1.458	12.8	42.7	98.9			S
1,2,4-Trichlorobenzene	1.1	1.0	1.673	0	68.7	27.1	118			
Surr: 2,4,6-Tribromophenol	1.8		3.336		55.0	21.3	145			
Surr: 2-Fluorobiphenyl	1.2		1.673		69.0	20	131			
Surr: 2-Fluorophenol	2.1		3.336		62.7	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.673		73.7	25.1	149			
Surr: Nitrobenzene-d5	0		1.673		0	25.6	137			S
Surr: Phenol-d5	2.2		3.336		67.4	20.3	132			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210372-001BMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-1 (2-4')** Batch ID: **4168** RunNo: **6106**
Prep Date: **10/8/2012** Analysis Date: **10/10/2012** SeqNo: **177070** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	2.2	0.99	1.661	0	132	38.6	100	3.07	20	S
4-Chloro-3-methylphenol	2.8	2.5	3.312	0	85.5	35.8	108	12.0	20	
2-Chlorophenol	2.5	0.99	3.312	0	76.2	48.2	96.1	14.0	20	
1,4-Dichlorobenzene	1.1	0.99	1.661	0	65.5	42.5	97.6	12.8	20	
2,4-Dinitrotoluene	ND	2.5	1.661	0	63.3	51.2	108	0	20	
N-Nitrosodi-n-propylamine	ND	0.99	1.661	0	0	31.6	114	0	20	S
4-Nitrophenol	3.5	1.2	3.312	0	107	22.7	144	200	20	R
Pentachlorophenol	ND	2.0	3.312	0	59.1	24	109	0	20	
Phenol	2.4	0.99	3.312	0	73.9	33.1	108	18.0	20	
Pyrene	2.0	0.99	1.661	1.458	31.7	42.7	98.9	17.1	20	S
1,2,4-Trichlorobenzene	1.2	0.99	1.661	0	75.0	27.1	118	8.06	20	
Surr: 2,4,6-Tribromophenol	2.3		3.312		70.5	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.3		1.661		79.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.312		74.6	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.661		78.0	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.3		1.661		80.2	25.6	137	0	0	
Surr: Phenol-d5	2.7		3.312		82.1	20.3	132	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4189**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4189**	RunNo: **6186**			
Prep Date: **10/9/2012**	Analysis Date: **10/11/2012**	SeqNo: **178221**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**mb-4189**	SampType:	**MBLK**		TestCode:	**EPA Method 8270C: Semivolatiles**					
Client ID:	**PBW**	Batch ID:	**4189**		RunNo:	**6186**					
Prep Date:	**10/9/2012**	Analysis Date:	**10/11/2012**		SeqNo:	**178221**	Units:	**µg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene		ND	10								
Fluorene		ND	10								
Hexachlorobenzene		ND	10								
Hexachlorobutadiene		ND	10								
Hexachlorocyclopentadiene		ND	10								
Hexachloroethane		ND	10								
Indeno(1,2,3-cd)pyrene		ND	10								
Isophorone		ND	10								
1-Methylnaphthalene		ND	10								
2-Methylnaphthalene		ND	10								
2-Methylphenol		ND	10								
3+4-Methylphenol		ND	10								
N-Nitrosodi-n-propylamine		ND	10								
N-Nitrosodimethylamine		ND	10								
N-Nitrosodiphenylamine		ND	10								
Naphthalene		ND	10								
2-Nitroaniline		ND	10								
3-Nitroaniline		ND	10								
4-Nitroaniline		ND	10								
Nitrobenzene		ND	10								
2-Nitrophenol		ND	10								
4-Nitrophenol		ND	10								
Pentachlorophenol		ND	20								
Phenanthrene		ND	10								
Phenol		ND	10								
Pyrene		ND	10								
Pyridine		ND	10								
1,2,4-Trichlorobenzene		ND	10								
2,4,5-Trichlorophenol		ND	10								
2,4,6-Trichlorophenol		ND	10								
Surr: 2,4,6-Tribromophenol		170		200.0		87.2	44.2	126			
Surr: 2-Fluorobiphenyl		66		100.0		66.3	37	114			
Surr: 2-Fluorophenol		140		200.0		70.4	23.4	98			
Surr: 4-Terphenyl-d14		73		100.0		72.8	41.3	116			
Surr: Nitrobenzene-d5		86		100.0		86.0	39.5	118			
Surr: Phenol-d5		100		200.0		52.1	20.9	95.9			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4189** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **4189** RunNo: **6186**
Prep Date: **10/9/2012** Analysis Date: **10/11/2012** SeqNo: **178222** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	64	10	100.0	0	63.6	38.2	99.4			
4-Chloro-3-methylphenol	160	10	200.0	0	78.0	35.5	108			
2-Chlorophenol	140	10	200.0	0	69.7	29.8	106			
1,4-Dichlorobenzene	60	10	100.0	0	60.1	32.6	91.5			
2,4-Dinitrotoluene	85	10	100.0	0	84.9	44.7	112			
N-Nitrosodi-n-propylamine	84	10	100.0	0	83.9	38.5	105			
4-Nitrophenol	100	10	200.0	0	50.2	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	62.2	20.2	93			
Phenol	84	10	200.0	0	42.1	23	66.1			
Pyrene	68	10	100.0	0	67.8	40.1	101			
1,2,4-Trichlorobenzene	65	10	100.0	0	64.8	37.7	99.1			
Surr: 2,4,6-Tribromophenol	180		200.0		89.1	44.2	126			
Surr: 2-Fluorobiphenyl	72		100.0		71.9	37	114			
Surr: 2-Fluorophenol	120		200.0		58.5	23.4	98			
Surr: 4-Terphenyl-d14	73		100.0		72.9	41.3	116			
Surr: Nitrobenzene-d5	79		100.0		78.7	39.5	118			
Surr: Phenol-d5	97		200.0		48.5	20.9	95.9			

Sample ID **lcsd-4189** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **4189** RunNo: **6186**
Prep Date: **10/9/2012** Analysis Date: **10/11/2012** SeqNo: **178223** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	67	10	100.0	0	66.9	38.2	99.4	5.09	20	
4-Chloro-3-methylphenol	160	10	200.0	0	80.0	35.5	108	2.51	20	
2-Chlorophenol	130	10	200.0	0	66.7	29.8	106	4.41	20	
1,4-Dichlorobenzene	58	10	100.0	0	57.9	32.6	91.5	3.73	20	
2,4-Dinitrotoluene	88	10	100.0	0	87.8	44.7	112	3.45	20	
N-Nitrosodi-n-propylamine	77	10	100.0	0	76.7	38.5	105	8.99	20	
4-Nitrophenol	100	10	200.0	0	52.4	11.6	73.1	4.27	20	
Pentachlorophenol	120	20	200.0	0	60.4	20.2	93	2.94	20	
Phenol	89	10	200.0	0	44.4	23	66.1	5.20	20	
Pyrene	69	10	100.0	0	69.2	40.1	101	2.10	20	
1,2,4-Trichlorobenzene	63	10	100.0	0	62.7	37.7	99.1	3.29	20	
Surr: 2,4,6-Tribromophenol	170		200.0		82.5	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	68		100.0		67.8	37	114	0	0	
Surr: 2-Fluorophenol	120		200.0		59.0	23.4	98	0	0	
Surr: 4-Terphenyl-d14	69		100.0		68.7	41.3	116	0	0	
Surr: Nitrobenzene-d5	75		100.0		75.3	39.5	118	0	0	
Surr: Phenol-d5	97		200.0		48.7	20.9	95.9	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4227** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4227** RunNo: **6170**
Prep Date: **10/10/2012** Analysis Date: **10/11/2012** SeqNo: **177797** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4227** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4227** RunNo: **6170**
Prep Date: **10/10/2012** Analysis Date: **10/11/2012** SeqNo: **177798** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.5	80	120			

Sample ID **1210372-017CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-6 (11-12')** Batch ID: **4227** RunNo: **6170**
Prep Date: **10/10/2012** Analysis Date: **10/11/2012** SeqNo: **177823** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1674	0	104	75	125			

Sample ID **1210372-017CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-6 (11-12')** Batch ID: **4227** RunNo: **6170**
Prep Date: **10/10/2012** Analysis Date: **10/11/2012** SeqNo: **177824** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1653	0	104	75	125	1.11	20	

Sample ID **MB-4314** SampType: **mblk** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180677** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4314** SampType: **lcs** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180678** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	100	80	120			

Sample ID **1210582-006CMS** SampType: **ms** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180706** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1669	0.01973	92.8	75	125			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210582-006CMSD**	SampType:	**msd**	TestCode:	**EPA Method 7471: Mercury**
Client ID:	**BatchQC**	Batch ID:	**4314**	RunNo:	**6270**
Prep Date:	**10/15/2012**	Analysis Date:	**10/16/2012**	SeqNo:	**180707** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1660	0.01973	95.3	75	125	1.94	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210372**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4191** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4191** RunNo: **6163**
Prep Date: **10/9/2012** Analysis Date: **10/11/2012** SeqNo: **177648** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4191** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4191** RunNo: **6163**
Prep Date: **10/9/2012** Analysis Date: **10/11/2012** SeqNo: **177649** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0	99.4	80	120			
Arsenic	25	2.5	25.00	0	99.0	80	120			
Barium	25	0.10	25.00	0	99.6	80	120			
Beryllium	26	0.15	25.00	0	104	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	25	0.30	25.00	0	99.6	80	120			
Cobalt	25	0.30	25.00	0	98.4	80	120			
Iron	25	1.0	25.00	0	102	80	120			
Lead	25	0.25	25.00	0.2260	100	80	120			
Manganese	25	0.10	25.00	0.03150	98.1	80	120			
Nickel	24	0.50	25.00	0	96.4	80	120			
Selenium	23	2.5	25.00	0	92.3	80	120			
Silver	5.1	0.25	5.000	0	101	80	120			
Vanadium	25	2.5	25.00	0	101	80	120			
Zinc	25	2.5	25.00	0	101	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210372

Received by/date: AF 10/06/12

Logged By: **Lindsay Mangin** 10/6/2012 8:15:00 AM

Completed By: **Lindsay Mangin** 10/7/2012 7:15:35 AM

Reviewed By: MG 10/08/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐

Added 2mL HNO3 to 014E, 027D. Added 1mL to 028D for acceptable pH.

11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 4 (<2 or >12 unless noted)
Adjusted? yes
Checked by: MG

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.5	Good	Not Present			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NEW MEXICO 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH – RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☐ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH – RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 0.5°C

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210372	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/5/12	1410	SOIL	SWMU 1-1 (2-4')	2 VIALS	MeOH	-001										X						
	↓		↓	3 JARS	—											X	X	X	X			
	1415		SWMU 1-1 (10-12')	2 VIALS	MeOH	-002										X						
	↓		↓	1 JAR	—											X	X	X	X			
	1430		SWMU 1-1 (13-14')	2 VIALS	MeOH	-003										X						
	↓		↓	3 JARS	—											X	X	X	X			

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10/6/12	0815	[signature]	[signature]	10/6/12	0815
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Remarks:

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Turn-Around Time:
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Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 0.5°C

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10/5/12	1110	SOIL	SWMU 1-8 (16-18') DUP	2 VIALS	5OB1	-004										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1125	SOIL	SWMU 1-8 (19-20')	2 VIALS	5OB1	-005										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

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QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 0.5°C

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Analysis Request

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10/5/12	1020	SOIL	SWMU 1-8 (4-6')	2 VIALS	SOBI	-006										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1030		SWMU 1-8 (10-12')	2 VIALS	SOBI	-007										X						
				2 VIALS	MEOH											X						
				1 JAR	—											X	X	X	X			
	1040		SWMU 1-8 (12-14')	~~2 VIALS~~	~~SOBI~~	-008																
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1110		SWMU 1-8 (16-18')	2 VIALS	SOBI	-009										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

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☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 0.5°C

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10/5/12	1740	W	EB100512	6 VOA	HCL	-010										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3	—													X			
				1 PLASTIC	NAOH														X			
				1 PLASTIC	—														X			
10/5/12	—	W	TRIP BLANK	3 VOA	HCL	-011										X						

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Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No.1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 0.5°C

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10/5/12	0745	GW	SWMU 1-4 GW	1 PLASTIC	HNO_3	-012													X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			
	1520	GW	SWMU 1-5 GW	6 VOA	HCL	-013										X						
				1 AMBER	—												X					
	1605	GW	SWMU 1-8 GW	6 VOA	HCL	-014										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			

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Turn-Around Time:
☐ Standard ☐ Rush _____
Project Name: SWMU No.1
Project #:
Project Manager: SCOTT CROUCH -RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 0.5°C

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10/4/12	1440	SOIL	SWMU 1-7(16-18')	2 VIALS	SOB1	-015										X						
↓	↓	↓	↓	2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

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☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: SWMU No 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 0.5°C

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10/4/12	1145	SOIL	SWMU 1-6 (10-11')	2 VIALS	SOBI	-016										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1155		SWMU 1-6 (11-12')	2 VIALS	SOBI	-017										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1355		SWMU 1-7 (12-14')	2 VIALS	SOBI	-018										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1415		SWMU 1-7 (14-16')	2 VIALS	SOBI	-019										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

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10/4/12	1055	SOIL	SWMU 1-6 (2-4')	2 VIALS	SOBI	-020										X						
				2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			
			SWMU 1-6 (2-4') DUP	2 VIALS	SOBI	-021										X						
				2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			
	1115		SWMU 1-6 (4-6')	2 VIALS	SOBI	-022										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1130		SWMU 1-6 (7.5-8')	2 VIALS	SOBI	-023										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

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10/4/12	1725	WATER	EB100412	6 VOA	HCL & NEAT	-024										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			
10/4/12	—	WATER	TRIP BLANK	3 VOA	HCL	-025										X						

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10/4/12	0925	GW	SWMU 1-4 GW	6 VOA	HCL & NEAT	-026										X						
	↓	↓	↓	1 AMBER	—												X					
	1605	GW	SWMU 1-6 GW	6 VOA	HCL & NEAT	-027										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
	↓	↓	↓	1 PLASTIC	—														X			
	1655	GW	SWMU 1-7 GW	6 VOA	HCL & NEAT	-028										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
	↓	↓	↓	1 PLASTIC	—														X			

Date:	Time:	Relinquished by:	Received by:	Date Time
10/6/12	0815	[signature]	[signature]	10/6/12 0815
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks:

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

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

November 12, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210521

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/10/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210521**
Date Reported: **11/12/2012**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-001
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	14	10		mg/Kg	1	10/11/2012 12:01:08 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/11/2012 12:01:08 PM
Surr: DNOP	102	77.6-140		%REC	1	10/11/2012 12:01:08 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 2:11:20 PM
Surr: BFB	106	84-116		%REC	1	10/12/2012 2:11:20 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:47:23 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 3:30:30 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 3:30:30 PM
Barium	220	1.0		mg/Kg	10	10/16/2012 3:55:33 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 3:30:30 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 3:30:30 PM
Chromium	9.5	1.5		mg/Kg	5	10/16/2012 3:30:30 PM
Cobalt	5.1	1.5		mg/Kg	5	10/16/2012 3:30:30 PM
Iron	20000	500		mg/Kg	500	10/16/2012 3:52:52 PM
Lead	9.3	1.2		mg/Kg	5	10/16/2012 3:30:30 PM
Manganese	520	5.0		mg/Kg	50	10/16/2012 3:50:28 PM
Nickel	9.0	2.5		mg/Kg	5	10/16/2012 3:30:30 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 3:30:30 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 3:30:30 PM
Vanadium	24	12		mg/Kg	5	10/16/2012 3:30:30 PM
Zinc	34	12		mg/Kg	5	10/16/2012 3:30:30 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Acenaphthylene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Aniline	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Anthracene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Azobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benz(a)anthracene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzoic acid	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
Benzyl alcohol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-001
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Carbazole	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/12/2012 11:37:43 AM
2-Chlorophenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Chrysene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	10/12/2012 11:37:43 AM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Dibenzofuran	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/12/2012 11:37:43 AM
Diethyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Dimethyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/12/2012 11:37:43 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/12/2012 11:37:43 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/12/2012 11:37:43 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
Fluoranthene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Fluorene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Hexachlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Hexachloroethane	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Isophorone	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2-Methylphenol	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
3+4-Methylphenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Naphthalene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2-Nitroaniline	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-001
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/12/2012 11:37:43 AM
Nitrobenzene	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
2-Nitrophenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/12/2012 11:37:43 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/12/2012 11:37:43 AM
Phenanthrene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Phenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Pyrene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Pyridine	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Surr: 2,4,6-Tribromophenol	74.0	21.3-145		%REC	1	10/12/2012 11:37:43 AM
Surr: 2-Fluorobiphenyl	65.7	20-131		%REC	1	10/12/2012 11:37:43 AM
Surr: 2-Fluorophenol	68.9	11.9-130		%REC	1	10/12/2012 11:37:43 AM
Surr: 4-Terphenyl-d14	63.6	25.1-149		%REC	1	10/12/2012 11:37:43 AM
Surr: Nitrobenzene-d5	63.3	25.6-137		%REC	1	10/12/2012 11:37:43 AM
Surr: Phenol-d5	70.3	20.3-132		%REC	1	10/12/2012 11:37:43 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.000878	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Toluene	0.00230	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Ethylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Xylenes, Total	0.00328	0.00158		mg/Kg	1	10/10/2012 3:39:11 PM
Methyl tert-butyl ether (MTBE)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2,4-Trimethylbenzene	0.00108	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,3,5-Trimethylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dichloroethane (EDC)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dibromoethane (EDB)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Naphthalene	ND	0.00158		mg/Kg	1	10/10/2012 3:39:11 PM
1-Methylnaphthalene	ND	0.00316		mg/Kg	1	10/10/2012 3:39:11 PM
2-Methylnaphthalene	ND	0.00316		mg/Kg	1	10/10/2012 3:39:11 PM
Acetone	0.0950	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
Bromobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Bromodichloromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Bromoform	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Bromomethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
2-Butanone	0.00862	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
Carbon tetrachloride	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Chlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Chloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-001
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Chloromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
2-Chlorotoluene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Carbon disulfide	ND	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
4-Chlorotoluene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
cis-1,2-DCE	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
cis-1,3-Dichloropropene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dibromo-3-chloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Dibromochloromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Dibromomethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,3-Dichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,4-Dichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Dichlorodifluoromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1-Dichloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1-Dichloroethene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dichloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,3-Dichloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
2,2-Dichloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1-Dichloropropene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Hexachlorobutadiene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Isopropylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
4-Isopropyltoluene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Methylene chloride	ND	0.00237		mg/Kg	1	10/10/2012 3:39:11 PM
n-Butylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
2-Hexanone	ND	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
n-Propylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
sec-Butylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Styrene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
4-Methyl-2-pentanone	ND	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
tert-Butylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1,1,2-Tetrachloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1,2,2-Tetrachloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Tetrachloroethene (PCE)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
trans-1,2-DCE	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
trans-1,3-Dichloropropene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2,3-Trichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2,4-Trichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1,1-Trichloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1,2-Trichloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Trichloroethene (TCE)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Trichlorofluoromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-001
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Vinyl chloride	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%REC	1	10/10/2012 3:39:11 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/10/2012 3:39:11 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/10/2012 3:39:11 PM
Surr: Toluene-d8	103	70-130		%REC	1	10/10/2012 3:39:11 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-002 **Matrix:** SOIL **Received Date:** 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	11	10		mg/Kg	1	10/11/2012 12:22:46 PM
Motor Oil Range Organics (MRO)	71	51		mg/Kg	1	10/11/2012 12:22:46 PM
Surr: DNOP	106	77.6-140		%REC	1	10/11/2012 12:22:46 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 2:40:10 PM
Surr: BFB	104	84-116		%REC	1	10/12/2012 2:40:10 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:49:08 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 4:00:28 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:00:28 PM
Barium	180	0.50		mg/Kg	5	10/16/2012 4:00:28 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 4:00:28 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:00:28 PM
Chromium	9.6	1.5		mg/Kg	5	10/16/2012 4:00:28 PM
Cobalt	4.4	1.5		mg/Kg	5	10/16/2012 4:00:28 PM
Iron	10000	500		mg/Kg	500	10/16/2012 4:05:17 PM
Lead	7.8	1.2		mg/Kg	5	10/16/2012 4:00:28 PM
Manganese	290	5.0		mg/Kg	50	10/16/2012 4:02:52 PM
Nickel	8.5	2.5		mg/Kg	5	10/16/2012 4:00:28 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 4:00:28 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:00:28 PM
Vanadium	18	12		mg/Kg	5	10/16/2012 4:00:28 PM
Zinc	29	12		mg/Kg	5	10/16/2012 4:00:28 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Aniline	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Anthracene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Azobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.1
Lab ID: 1210521-002 **Matrix:** SOIL

Client Sample ID: SWMU 1-24 (0-0.5') DUP
Collection Date: 10/8/2012 4:05:00 PM
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Carbazole	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/12/2012 1:05:42 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Chrysene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	10/12/2012 1:05:42 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/12/2012 1:05:42 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/12/2012 1:05:42 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Fluorene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Isophorone	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Naphthalene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-002
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/12/2012 1:05:42 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/12/2012 1:05:42 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/12/2012 1:05:42 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Phenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Pyrene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Pyridine	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Surr: 2,4,6-Tribromophenol	86.1	21.3-145		%REC	1	10/12/2012 1:05:42 PM
Surr: 2-Fluorobiphenyl	74.9	20-131		%REC	1	10/12/2012 1:05:42 PM
Surr: 2-Fluorophenol	86.0	11.9-130		%REC	1	10/12/2012 1:05:42 PM
Surr: 4-Terphenyl-d14	77.4	25.1-149		%REC	1	10/12/2012 1:05:42 PM
Surr: Nitrobenzene-d5	81.4	25.6-137		%REC	1	10/12/2012 1:05:42 PM
Surr: Phenol-d5	84.0	20.3-132		%REC	1	10/12/2012 1:05:42 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.000940	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Toluene	0.00290	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Ethylbenzene	0.000989	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Xylenes, Total	0.00436	0.00165		mg/Kg	1	10/10/2012 4:10:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2,4-Trimethylbenzene	0.00156	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,3,5-Trimethylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dichloroethane (EDC)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dibromoethane (EDB)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Naphthalene	ND	0.00165		mg/Kg	1	10/10/2012 4:10:01 PM
1-Methylnaphthalene	ND	0.00330		mg/Kg	1	10/10/2012 4:10:01 PM
2-Methylnaphthalene	ND	0.00330		mg/Kg	1	10/10/2012 4:10:01 PM
Acetone	0.0811	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
Bromobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Bromodichloromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Bromoform	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Bromomethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
2-Butanone	ND	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
Carbon tetrachloride	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Chlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Chloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-002 **Matrix:** SOIL **Received Date:** 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Chloromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
2-Chlorotoluene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Carbon disulfide	ND	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
4-Chlorotoluene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
cis-1,2-DCE	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
cis-1,3-Dichloropropene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dibromo-3-chloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Dibromochloromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Dibromomethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,3-Dichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,4-Dichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Dichlorodifluoromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1-Dichloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1-Dichloroethene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dichloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,3-Dichloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
2,2-Dichloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1-Dichloropropene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Hexachlorobutadiene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Isopropylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
4-Isopropyltoluene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Methylene chloride	ND	0.00247		mg/Kg	1	10/10/2012 4:10:01 PM
n-Butylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
2-Hexanone	ND	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
n-Propylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
sec-Butylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Styrene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
4-Methyl-2-pentanone	ND	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
tert-Butylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1,1,2-Tetrachloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1,2,2-Tetrachloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Tetrachloroethene (PCE)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
trans-1,2-DCE	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
trans-1,3-Dichloropropene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2,3-Trichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2,4-Trichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1,1-Trichloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1,2-Trichloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Trichloroethene (TCE)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Trichlorofluoromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/8/2012 4:05:00 PM
Lab ID: 1210521-002
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Vinyl chloride	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Surr: 1,2-Dichloroethane-d4	87.8	70-130		%REC	1	10/10/2012 4:10:01 PM
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	1	10/10/2012 4:10:01 PM
Surr: Dibromofluoromethane	89.0	70-130		%REC	1	10/10/2012 4:10:01 PM
Surr: Toluene-d8	93.3	70-130		%REC	1	10/10/2012 4:10:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:15:00 PM
Lab ID: 1210521-003
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/11/2012 8:41:57 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/11/2012 8:41:57 AM
Surr: DNOP	93.7	77.6-140		%REC	1	10/11/2012 8:41:57 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 3:09:00 PM
Surr: BFB	104	84-116		%REC	1	10/12/2012 3:09:00 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:50:54 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 4:23:04 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:23:04 PM
Barium	330	5.0		mg/Kg	50	10/16/2012 4:25:31 PM
Beryllium	0.86	0.75		mg/Kg	5	10/16/2012 4:23:04 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:23:04 PM
Chromium	7.4	1.5		mg/Kg	5	10/16/2012 4:23:04 PM
Cobalt	4.4	1.5		mg/Kg	5	10/16/2012 4:23:04 PM
Iron	12000	500		mg/Kg	500	10/16/2012 4:27:56 PM
Lead	4.4	1.2		mg/Kg	5	10/16/2012 4:23:04 PM
Manganese	410	5.0		mg/Kg	50	10/16/2012 4:25:31 PM
Nickel	7.0	2.5		mg/Kg	5	10/16/2012 4:23:04 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 4:23:04 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:23:04 PM
Vanadium	14	12		mg/Kg	5	10/16/2012 4:23:04 PM
Zinc	13	12		mg/Kg	5	10/16/2012 4:23:04 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:15:00 PM
Lab ID: 1210521-003
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 7:42:22 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 7:42:22 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 7:42:22 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:42:22 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 7:42:22 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 7:42:22 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:15:00 PM
Lab ID: 1210521-003
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 7:42:22 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 7:42:22 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:42:22 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Surr: 2,4,6-Tribromophenol	79.5	21.3-145		%REC	1	10/12/2012 7:42:22 AM
Surr: 2-Fluorobiphenyl	72.2	20-131		%REC	1	10/12/2012 7:42:22 AM
Surr: 2-Fluorophenol	70.7	11.9-130		%REC	1	10/12/2012 7:42:22 AM
Surr: 4-Terphenyl-d14	71.5	25.1-149		%REC	1	10/12/2012 7:42:22 AM
Surr: Nitrobenzene-d5	71.6	25.6-137		%REC	1	10/12/2012 7:42:22 AM
Surr: Phenol-d5	78.4	20.3-132		%REC	1	10/12/2012 7:42:22 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00215	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Toluene	0.00201	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Ethylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Xylenes, Total	ND	0.00146		mg/Kg	1	10/10/2012 4:40:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2,4-Trimethylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,3,5-Trimethylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dichloroethane (EDC)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dibromoethane (EDB)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Naphthalene	ND	0.00146		mg/Kg	1	10/10/2012 4:40:52 PM
1-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/10/2012 4:40:52 PM
2-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/10/2012 4:40:52 PM
Acetone	0.0549	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
Bromobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Bromodichloromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Bromoform	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Bromomethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
2-Butanone	0.00925	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
Carbon tetrachloride	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Chlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Chloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:15:00 PM
Lab ID: 1210521-003
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Chloromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
2-Chlorotoluene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Carbon disulfide	ND	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
4-Chlorotoluene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
cis-1,2-DCE	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
cis-1,3-Dichloropropene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dibromo-3-chloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Dibromochloromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Dibromomethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,3-Dichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,4-Dichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Dichlorodifluoromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1-Dichloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1-Dichloroethene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dichloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,3-Dichloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
2,2-Dichloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1-Dichloropropene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Hexachlorobutadiene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Isopropylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
4-Isopropyltoluene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Methylene chloride	ND	0.00220		mg/Kg	1	10/10/2012 4:40:52 PM
n-Butylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
2-Hexanone	ND	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
n-Propylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
sec-Butylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Styrene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
4-Methyl-2-pentanone	ND	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
tert-Butylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1,1,2-Tetrachloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1,2,2-Tetrachloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Tetrachloroethene (PCE)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
trans-1,2-DCE	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
trans-1,3-Dichloropropene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2,3-Trichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2,4-Trichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1,1-Trichloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1,2-Trichloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Trichloroethene (TCE)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Trichlorofluoromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:15:00 PM
Lab ID: 1210521-003
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Vinyl chloride	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	10/10/2012 4:40:52 PM
Surr: 4-Bromofluorobenzene	89.0	70-130		%REC	1	10/10/2012 4:40:52 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/10/2012 4:40:52 PM
Surr: Toluene-d8	97.2	70-130		%REC	1	10/10/2012 4:40:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (10.5-11.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:30:00 PM
Lab ID: 1210521-004
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/11/2012 9:03:31 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/11/2012 9:03:31 AM
Surr: DNOP	97.5	77.6-140		%REC	1	10/11/2012 9:03:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 3:37:47 PM
Surr: BFB	106	84-116		%REC	1	10/12/2012 3:37:47 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:52:41 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 4:30:35 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:30:35 PM
Barium	360	5.0		mg/Kg	50	10/16/2012 4:33:01 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 4:30:35 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:30:35 PM
Chromium	4.9	1.5		mg/Kg	5	10/16/2012 4:30:35 PM
Cobalt	3.9	1.5		mg/Kg	5	10/16/2012 4:30:35 PM
Iron	10000	500		mg/Kg	500	10/16/2012 4:35:27 PM
Lead	5.2	1.2		mg/Kg	5	10/16/2012 4:30:35 PM
Manganese	710	5.0		mg/Kg	50	10/16/2012 4:33:01 PM
Nickel	5.6	2.5		mg/Kg	5	10/16/2012 4:30:35 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 4:30:35 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:30:35 PM
Vanadium	13	12		mg/Kg	5	10/16/2012 4:30:35 PM
Zinc	ND	12		mg/Kg	5	10/16/2012 4:30:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (10.5-11.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:30:00 PM
Lab ID: 1210521-004
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 8:11:38 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 8:11:38 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 8:11:38 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:11:38 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 8:11:38 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 8:11:38 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (10.5-11.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:30:00 PM
Lab ID: 1210521-004
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:11:38 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 8:11:38 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:11:38 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Surr: 2,4,6-Tribromophenol	78.0	21.3-145		%REC	1	10/12/2012 8:11:38 AM
Surr: 2-Fluorobiphenyl	72.7	20-131		%REC	1	10/12/2012 8:11:38 AM
Surr: 2-Fluorophenol	70.9	11.9-130		%REC	1	10/12/2012 8:11:38 AM
Surr: 4-Terphenyl-d14	71.2	25.1-149		%REC	1	10/12/2012 8:11:38 AM
Surr: Nitrobenzene-d5	71.3	25.6-137		%REC	1	10/12/2012 8:11:38 AM
Surr: Phenol-d5	78.9	20.3-132		%REC	1	10/12/2012 8:11:38 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00208	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Toluene	0.00112	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Ethylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Xylenes, Total	ND	0.00147		mg/Kg	1	10/10/2012 5:11:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2,4-Trimethylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,3,5-Trimethylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dichloroethane (EDC)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dibromoethane (EDB)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Naphthalene	ND	0.00147		mg/Kg	1	10/10/2012 5:11:46 PM
1-Methylnaphthalene	ND	0.00294		mg/Kg	1	10/10/2012 5:11:46 PM
2-Methylnaphthalene	ND	0.00294		mg/Kg	1	10/10/2012 5:11:46 PM
Acetone	0.0361	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
Bromobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Bromodichloromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Bromoform	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Bromomethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
2-Butanone	ND	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
Carbon tetrachloride	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Chlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Chloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (10.5-11.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:30:00 PM
Lab ID: 1210521-004
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Chloromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
2-Chlorotoluene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Carbon disulfide	ND	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
4-Chlorotoluene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
cis-1,2-DCE	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
cis-1,3-Dichloropropene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dibromo-3-chloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Dibromochloromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Dibromomethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,3-Dichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,4-Dichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Dichlorodifluoromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1-Dichloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1-Dichloroethene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dichloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,3-Dichloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
2,2-Dichloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1-Dichloropropene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Hexachlorobutadiene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Isopropylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
4-Isopropyltoluene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Methylene chloride	ND	0.00221		mg/Kg	1	10/10/2012 5:11:46 PM
n-Butylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
2-Hexanone	ND	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
n-Propylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
sec-Butylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Styrene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
4-Methyl-2-pentanone	ND	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
tert-Butylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1,1,2-Tetrachloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1,2,2-Tetrachloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Tetrachloroethene (PCE)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
trans-1,2-DCE	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
trans-1,3-Dichloropropene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2,3-Trichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2,4-Trichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1,1-Trichloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1,2-Trichloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Trichloroethene (TCE)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Trichlorofluoromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (10.5-11.5')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:30:00 PM
Lab ID: 1210521-004
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Vinyl chloride	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%REC	1	10/10/2012 5:11:46 PM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	1	10/10/2012 5:11:46 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/10/2012 5:11:46 PM
Surr: Toluene-d8	93.4	70-130		%REC	1	10/10/2012 5:11:46 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (16-18')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:40:00 PM
Lab ID: 1210521-005
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/11/2012 9:25:09 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/11/2012 9:25:09 AM
Surr: DNOP	96.6	77.6-140		%REC	1	10/11/2012 9:25:09 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 4:06:37 PM
Surr: BFB	109	84-116		%REC	1	10/12/2012 4:06:37 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:54:29 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 4:38:05 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:38:05 PM
Barium	480	5.0		mg/Kg	50	10/16/2012 4:40:30 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 4:38:05 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:38:05 PM
Chromium	5.9	1.5		mg/Kg	5	10/16/2012 4:38:05 PM
Cobalt	3.0	1.5		mg/Kg	5	10/16/2012 4:38:05 PM
Iron	9500	500		mg/Kg	500	10/16/2012 4:44:35 PM
Lead	4.9	1.2		mg/Kg	5	10/16/2012 4:38:05 PM
Manganese	790	5.0		mg/Kg	50	10/16/2012 4:40:30 PM
Nickel	4.7	2.5		mg/Kg	5	10/16/2012 4:38:05 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 4:38:05 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:38:05 PM
Vanadium	16	12		mg/Kg	5	10/16/2012 4:38:05 PM
Zinc	ND	12		mg/Kg	5	10/16/2012 4:38:05 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (16-18')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:40:00 PM
Lab ID: 1210521-005
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 8:40:52 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 8:40:52 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 8:40:52 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:40:52 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 8:40:52 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 8:40:52 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (16-18')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:40:00 PM
Lab ID: 1210521-005
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:40:52 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 8:40:52 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:40:52 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Surr: 2,4,6-Tribromophenol	74.0	21.3-145		%REC	1	10/12/2012 8:40:52 AM
Surr: 2-Fluorobiphenyl	61.4	20-131		%REC	1	10/12/2012 8:40:52 AM
Surr: 2-Fluorophenol	65.9	11.9-130		%REC	1	10/12/2012 8:40:52 AM
Surr: 4-Terphenyl-d14	60.4	25.1-149		%REC	1	10/12/2012 8:40:52 AM
Surr: Nitrobenzene-d5	68.9	25.6-137		%REC	1	10/12/2012 8:40:52 AM
Surr: Phenol-d5	71.5	20.3-132		%REC	1	10/12/2012 8:40:52 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Toluene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Ethylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Xylenes, Total	ND	0.00219		mg/Kg	1	10/11/2012 4:10:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2,4-Trimethylbenzene	0.00202	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,3,5-Trimethylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dichloroethane (EDC)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dibromoethane (EDB)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Naphthalene	ND	0.00219		mg/Kg	1	10/11/2012 4:10:57 PM
1-Methylnaphthalene	ND	0.00437		mg/Kg	1	10/11/2012 4:10:57 PM
2-Methylnaphthalene	ND	0.00437		mg/Kg	1	10/11/2012 4:10:57 PM
Acetone	0.0834	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
Bromobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Bromodichloromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Bromoform	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Bromomethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
2-Butanone	0.0200	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
Carbon tetrachloride	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Chlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Chloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (16-18')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:40:00 PM
Lab ID: 1210521-005
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Chloromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
2-Chlorotoluene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Carbon disulfide	ND	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
4-Chlorotoluene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
cis-1,2-DCE	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
cis-1,3-Dichloropropene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dibromo-3-chloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Dibromochloromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Dibromomethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,3-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,4-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Dichlorodifluoromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1-Dichloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1-Dichloroethene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dichloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,3-Dichloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
2,2-Dichloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1-Dichloropropene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Hexachlorobutadiene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Isopropylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
4-Isopropyltoluene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Methylene chloride	ND	0.00328		mg/Kg	1	10/11/2012 4:10:57 PM
n-Butylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
2-Hexanone	ND	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
n-Propylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
sec-Butylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Styrene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
4-Methyl-2-pentanone	ND	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
tert-Butylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1,1,2-Tetrachloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1,2,2-Tetrachloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Tetrachloroethene (PCE)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
trans-1,2-DCE	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
trans-1,3-Dichloropropene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2,3-Trichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2,4-Trichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1,1-Trichloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1,2-Trichloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Trichloroethene (TCE)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Trichlorofluoromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (16-18')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:40:00 PM
Lab ID: 1210521-005
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Vinyl chloride	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%REC	1	10/11/2012 4:10:57 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	1	10/11/2012 4:10:57 PM
Surr: Dibromofluoromethane	94.1	70-130		%REC	1	10/11/2012 4:10:57 PM
Surr: Toluene-d8	110	70-130		%REC	1	10/11/2012 4:10:57 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (24-26')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:55:00 PM
Lab ID: 1210521-006
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/11/2012 9:46:46 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/11/2012 9:46:46 AM
Surr: DNOP	94.6	77.6-140		%REC	1	10/11/2012 9:46:46 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 4:35:22 PM
Surr: BFB	135	84-116	S	%REC	1	10/12/2012 4:35:22 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:56:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 4:47:26 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:47:26 PM
Barium	160	0.50		mg/Kg	5	10/16/2012 4:47:26 PM
Beryllium	0.89	0.75		mg/Kg	5	10/16/2012 4:47:26 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:47:26 PM
Chromium	9.9	1.5		mg/Kg	5	10/16/2012 4:47:26 PM
Cobalt	4.8	1.5		mg/Kg	5	10/16/2012 4:47:26 PM
Iron	13000	500		mg/Kg	500	10/16/2012 5:00:50 PM
Lead	3.4	1.2		mg/Kg	5	10/16/2012 4:47:26 PM
Manganese	640	5.0		mg/Kg	50	10/16/2012 4:58:26 PM
Nickel	7.7	2.5		mg/Kg	5	10/16/2012 4:47:26 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:41:06 AM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:47:26 PM
Vanadium	23	12		mg/Kg	5	10/16/2012 4:47:26 PM
Zinc	17	12		mg/Kg	5	10/16/2012 4:47:26 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (24-26')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:55:00 PM
Lab ID: 1210521-006
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 9:10:07 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 9:10:07 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 9:10:07 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:10:07 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 9:10:07 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 9:10:07 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (24-26')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:55:00 PM
Lab ID: 1210521-006
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 9:10:07 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 9:10:07 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:10:07 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Surr: 2,4,6-Tribromophenol	81.7	21.3-145		%REC	1	10/12/2012 9:10:07 AM
Surr: 2-Fluorobiphenyl	71.6	20-131		%REC	1	10/12/2012 9:10:07 AM
Surr: 2-Fluorophenol	73.6	11.9-130		%REC	1	10/12/2012 9:10:07 AM
Surr: 4-Terphenyl-d14	70.0	25.1-149		%REC	1	10/12/2012 9:10:07 AM
Surr: Nitrobenzene-d5	56.8	25.6-137		%REC	1	10/12/2012 9:10:07 AM
Surr: Phenol-d5	84.7	20.3-132		%REC	1	10/12/2012 9:10:07 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00396	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Toluene	0.00493	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Ethylbenzene	0.00733	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Xylenes, Total	0.0289	0.00291		mg/Kg	1	10/12/2012 11:13:07 AM
Methyl tert-butyl ether (MTBE)	0.00571	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2,4-Trimethylbenzene	0.0306	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,3,5-Trimethylbenzene	0.00599	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dichloroethane (EDC)	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dibromoethane (EDB)	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Naphthalene	0.0727	0.00291		mg/Kg	1	10/12/2012 11:13:07 AM
1-Methylnaphthalene	0.0456	0.00582		mg/Kg	1	10/12/2012 11:13:07 AM
2-Methylnaphthalene	0.0659	0.00582		mg/Kg	1	10/12/2012 11:13:07 AM
Acetone	0.0758	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
Bromobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Bromodichloromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Bromoform	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Bromomethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
2-Butanone	0.0179	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
Carbon tetrachloride	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Chlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Chloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (24-26')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:55:00 PM
Lab ID: 1210521-006
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Chloromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
2-Chlorotoluene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Carbon disulfide	ND	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
4-Chlorotoluene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
cis-1,2-DCE	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
cis-1,3-Dichloropropene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dibromo-3-chloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Dibromochloromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Dibromomethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,3-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,4-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Dichlorodifluoromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1-Dichloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1-Dichloroethene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dichloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,3-Dichloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
2,2-Dichloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1-Dichloropropene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Hexachlorobutadiene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Isopropylbenzene	0.00161	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
4-Isopropyltoluene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Methylene chloride	ND	0.00436		mg/Kg	1	10/12/2012 11:13:07 AM
n-Butylbenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
2-Hexanone	ND	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
n-Propylbenzene	0.00318	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
sec-Butylbenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Styrene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
4-Methyl-2-pentanone	ND	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
tert-Butylbenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1,1,2-Tetrachloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1,2,2-Tetrachloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Tetrachloroethene (PCE)	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
trans-1,2-DCE	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
trans-1,3-Dichloropropene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2,3-Trichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2,4-Trichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1,1-Trichloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1,2-Trichloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Trichloroethene (TCE)	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Trichlorofluoromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (24-26')
Project: SWMU NO.1
Collection Date: 10/8/2012 4:55:00 PM
Lab ID: 1210521-006
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Vinyl chloride	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	10/12/2012 11:13:07 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/12/2012 11:13:07 AM
Surr: Dibromofluoromethane	94.5	70-130		%REC	1	10/12/2012 11:13:07 AM
Surr: Toluene-d8	117	70-130		%REC	1	10/12/2012 11:13:07 AM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (32-34')
Project: SWMU NO.1
Collection Date: 10/8/2012 5:05:00 PM
Lab ID: 1210521-007
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/11/2012 10:08:19 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/11/2012 10:08:19 AM
Surr: DNOP	101	77.6-140		%REC	1	10/11/2012 10:08:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 5:04:07 PM
Surr: BFB	107	84-116		%REC	1	10/12/2012 5:04:07 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:58:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 5:03:26 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:03:26 PM
Barium	220	0.50		mg/Kg	5	10/16/2012 5:03:26 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 5:03:26 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:03:26 PM
Chromium	8.1	1.5		mg/Kg	5	10/16/2012 5:03:26 PM
Cobalt	3.9	1.5		mg/Kg	5	10/16/2012 5:03:26 PM
Iron	24000	500		mg/Kg	500	10/16/2012 5:08:16 PM
Lead	8.6	1.2		mg/Kg	5	10/16/2012 5:03:26 PM
Manganese	730	5.0		mg/Kg	50	10/16/2012 5:05:52 PM
Nickel	5.0	2.5		mg/Kg	5	10/16/2012 5:03:26 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 6:35:11 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:03:26 PM
Vanadium	53	12		mg/Kg	5	10/16/2012 5:03:26 PM
Zinc	ND	12		mg/Kg	5	10/16/2012 5:03:26 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzoic acid	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (32-34')
Project: SWMU NO.1
Collection Date: 10/8/2012 5:05:00 PM
Lab ID: 1210521-007
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 9:39:23 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 9:39:23 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 9:39:23 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:39:23 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 9:39:23 AM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 9:39:23 AM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Isophorone	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2-Methylphenol	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (32-34')
Project: SWMU NO.1
Collection Date: 10/8/2012 5:05:00 PM
Lab ID: 1210521-007
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 9:39:23 AM
Nitrobenzene	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 9:39:23 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:39:23 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Pyridine	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Surr: 2,4,6-Tribromophenol	74.2	21.3-145		%REC	1	10/12/2012 9:39:23 AM
Surr: 2-Fluorobiphenyl	65.7	20-131		%REC	1	10/12/2012 9:39:23 AM
Surr: 2-Fluorophenol	64.9	11.9-130		%REC	1	10/12/2012 9:39:23 AM
Surr: 4-Terphenyl-d14	61.6	25.1-149		%REC	1	10/12/2012 9:39:23 AM
Surr: Nitrobenzene-d5	66.0	25.6-137		%REC	1	10/12/2012 9:39:23 AM
Surr: Phenol-d5	75.1	20.3-132		%REC	1	10/12/2012 9:39:23 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00152	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Toluene	0.00137	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Xylenes, Total	ND	0.00209		mg/Kg	1	10/12/2012 12:45:24 PM
Methyl tert-butyl ether (MTBE)	0.00166	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Naphthalene	ND	0.00209		mg/Kg	1	10/12/2012 12:45:24 PM
1-Methylnaphthalene	ND	0.00417		mg/Kg	1	10/12/2012 12:45:24 PM
2-Methylnaphthalene	ND	0.00417		mg/Kg	1	10/12/2012 12:45:24 PM
Acetone	0.0327	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
Bromobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Bromoform	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Bromomethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
2-Butanone	ND	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Chloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (32-34')
Project: SWMU NO.1
Collection Date: 10/8/2012 5:05:00 PM
Lab ID: 1210521-007
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Chloromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Dibromomethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Methylene chloride	ND	0.00313		mg/Kg	1	10/12/2012 12:45:24 PM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
2-Hexanone	ND	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Styrene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 (32-34')
Project: SWMU NO.1
Collection Date: 10/8/2012 5:05:00 PM
Lab ID: 1210521-007
Matrix: SOIL
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	10/12/2012 12:45:24 PM
Surr: 4-Bromofluorobenzene	91.5	70-130		%REC	1	10/12/2012 12:45:24 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/12/2012 12:45:24 PM
Surr: Toluene-d8	94.9	70-130		%REC	1	10/12/2012 12:45:24 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210521-008
Matrix: MEOH (SOIL)
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 5:32:51 PM
Surr: BFB	105	84-116		%REC	1	10/12/2012 5:32:51 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Toluene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Naphthalene	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/15/2012 9:14:08 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/15/2012 9:14:08 PM
Acetone	ND	0.75		mg/Kg	1	10/15/2012 9:14:08 PM
Bromobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Bromoform	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Bromomethane	ND	0.15		mg/Kg	1	10/15/2012 9:14:08 PM
2-Butanone	ND	0.50		mg/Kg	1	10/15/2012 9:14:08 PM
Carbon disulfide	ND	0.50		mg/Kg	1	10/15/2012 9:14:08 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Chlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Chloroethane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Chloroform	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Chloromethane	ND	0.15		mg/Kg	1	10/15/2012 9:14:08 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Dibromomethane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210521-008
Matrix: MEOH (SOIL)
Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
2-Hexanone	ND	0.50		mg/Kg	1	10/15/2012 9:14:08 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/15/2012 9:14:08 PM
Methylene chloride	ND	0.15		mg/Kg	1	10/15/2012 9:14:08 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/15/2012 9:14:08 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Styrene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Vinyl chloride	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%REC	1	10/15/2012 9:14:08 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	1	10/15/2012 9:14:08 PM
Surr: Dibromofluoromethane	90.9	70-130		%REC	1	10/15/2012 9:14:08 PM
Surr: Toluene-d8	104	70-130		%REC	1	10/15/2012 9:14:08 PM

Qualifiers:

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

Anatek Labs, Inc.

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

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

Batch #: 121011049
Project Name: 1210521

Analytical Results Report

Sample Number 121011049-001 **Sampling Date** 10/8/2012 **Date/Time Received** 10/11/2012 1:10 PM
Client Sample ID 1210521-001D / SWMU 1-24 (0-0.5) **Sampling Time** 4:05 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	4.1	Percent		10/24/2012	CRW	%moisture	

Sample Number 121011049-002 **Sampling Date** 10/8/2012 **Date/Time Received** 10/11/2012 1:10 PM
Client Sample ID 1210521-002D / SWMU 1-24 (0-0.5) DUP **Sampling Time** 4:05 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	4.5	Percent		10/24/2012	CRW	%moisture	

Sample Number 121011049-003 **Sampling Date** 10/8/2012 **Date/Time Received** 10/11/2012 1:10 PM
Client Sample ID 1210521-003D / SWMU 1-24 (1.5-2) **Sampling Time** 4:15 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	8.6	Percent		10/24/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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

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

Batch #: 121011049
Project Name: 1210521

Analytical Results Report

Sample Number 121011049-004 **Sampling Date** 10/8/2012 **Date/Time Received** 10/11/2012 1:10 PM
Client Sample ID 1210521-004D / SWMU 1-24 (10.5-11.5) **Sampling Time** 4:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/22/2012	CRW	EPA 335.4	
%moisture	12.6	Percent		10/24/2012	CRW	%moisture	

Sample Number 121011049-005 **Sampling Date** 10/8/2012 **Date/Time Received** 10/11/2012 1:10 PM
Client Sample ID 1210521-005D / SWMU 1-24 (16-18) **Sampling Time** 4:40 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/22/2012	CRW	EPA 335.4	
%moisture	16.3	Percent		10/24/2012	CRW	%moisture	

Sample Number 121011049-006 **Sampling Date** 10/8/2012 **Date/Time Received** 10/11/2012 1:10 PM
Client Sample ID 1210521-006D / SWMU 1-24 (24-26) **Sampling Time** 4:55 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.908	mg/Kg	0.3	10/22/2012	CRW	EPA 335.4	
%moisture	19.4	Percent		10/24/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

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

Batch #: 121011049
Project Name: 1210521

Analytical Results Report

Sample Number	121011049-007	**Sampling Date**	10/8/2012	**Date/Time Received**	10/11/2012 1:10 PM
Client Sample ID	1210521-007D / SWMU 1-24 (32-34)			**Sampling Time**	5:05 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/22/2012	CRW	EPA 335.4	
%moisture	14	Percent		10/24/2012	CRW	%moisture	

Authorized Signature

John Coddington, Lab Manager

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

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

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4226**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Diesel Range Organics**
Client ID:	**PBS**	Batch ID:	**4226**	RunNo:	**6108**
Prep Date:	**10/10/2012**	Analysis Date:	**10/10/2012**	SeqNo:	**176584** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.4	77.6	140			

Sample ID	**LCS-4226**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range Organics**
Client ID:	**LCSS**	Batch ID:	**4226**	RunNo:	**6108**
Prep Date:	**10/10/2012**	Analysis Date:	**10/10/2012**	SeqNo:	**176585** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	52.6	130			
Surr: DNOP	4.0		5.000		79.7	77.6	140			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178737** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178738** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID **1210582-004BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178751** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.2	5.0	18.26	0	39.3	70	130			S
Surr: BFB	780		730.5		107	84	116			

Sample ID **1210582-004BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178752** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	18.26	0	87.4	70	130	76.0	22.1	R
Surr: BFB	800		730.5		109	84	116	0	0	

Sample ID **B27** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178761** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	84	116			

Sample ID **2.5UG GRO LCS-II** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **178762** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	74	117			
Surr: BFB	1100		1000		112	84	116			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210653-005BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178768** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	70	130			
Surr: BFB	1100		1000		113	84	116			

Sample ID **1210653-005BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178769** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	70	130	7.96	22.1	
Surr: BFB	1200		1000		117	84	116	0	0	S

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4282** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **4282** RunNo: **6255**
Prep Date: **10/12/2012** Analysis Date: **10/16/2012** SeqNo: **180339** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.6	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.8	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.8	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID **lcs-4282** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **4282** RunNo: **6255**
Prep Date: **10/12/2012** Analysis Date: **10/16/2012** SeqNo: **180340** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.2	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.6	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.6	70	130			
Surr: Toluene-d8	0.50		0.5000		99.8	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4229**	SampType:	**MBLK**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**PBS**	Batch ID:	**4229**	RunNo:	**6153**
Prep Date:	**10/10/2012**	Analysis Date:	**10/10/2012**	SeqNo:	**177265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4229** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4229** RunNo: **6153**
Prep Date: **10/10/2012** Analysis Date: **10/10/2012** SeqNo: **177265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.5		50.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	48.6		50.00		97.2	70	130			
Surr: Dibromofluoromethane	50.8		50.00		102	70	130			
Surr: Toluene-d8	44.6		50.00		89.3	70	130			

Sample ID **LCS-4229** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4229** RunNo: **6153**
Prep Date: **10/10/2012** Analysis Date: **10/10/2012** SeqNo: **177267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.19	1.00	8.000	0	102	60	140			
Toluene	8.34	1.00	8.000	0	104	60	140			
Chlorobenzene	8.45	1.00	8.000	0	106	60	140			
1,1-Dichloroethene	9.31	1.00	8.000	0	116	60	140			
Trichloroethene (TCE)	6.81	1.00	8.000	0	85.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.6		50.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	45.3		50.00		90.5	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**LCS-4229**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4229**	RunNo:	**6153**
Prep Date:	**10/10/2012**	Analysis Date:	**10/10/2012**	SeqNo:	**177267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	51.1		50.00		102	70	130			
Surr: Toluene-d8	51.1		50.00		102	70	130			

Sample ID	**mb-4251**	SampType:	**MBLK**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**PBS**	Batch ID:	**4251**	RunNo:	**6184**
Prep Date:	**10/11/2012**	Analysis Date:	**10/11/2012**	SeqNo:	**178168** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4251**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4251**	RunNo: **6184**			
Prep Date: **10/11/2012**	Analysis Date: **10/11/2012**	SeqNo: **178168**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.4		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	44.5		50.00		89.0	70	130			
Surr: Dibromofluoromethane	45.4		50.00		90.9	70	130			
Surr: Toluene-d8	43.9		50.00		87.8	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4280**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4280**	RunNo: **6223**			
Prep Date: **10/12/2012**	Analysis Date: **10/12/2012**	SeqNo: **179318**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4280** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4280** RunNo: **6223**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179318** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.9		50.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.3	70	130			
Surr: Dibromofluoromethane	49.4		50.00		98.8	70	130			
Surr: Toluene-d8	46.4		50.00		92.9	70	130			

Sample ID **lcs-4251** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4251** RunNo: **6184**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **180403** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9.63	1.00	10.00	0	96.3	60	140			
Toluene	9.93	1.00	10.00	0	99.3	60	140			
Chlorobenzene	10.3	1.00	10.00	0	103	60	140			
1,1-Dichloroethene	11.1	1.00	10.00	0	111	60	140			
Trichloroethene (TCE)	8.17	1.00	10.00	0	81.7	60	140			
Surr: 1,2-Dichloroethane-d4	45.2		50.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4251** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4251** RunNo: **6184**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **180403** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.8		50.00		93.5	70	130			
Surr: Toluene-d8	49.1		50.00		98.2	70	130			

Sample ID **lcs-4280** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4280** RunNo: **6223**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **180404** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12.3	1.00	12.50	0	98.3	60	140			
Toluene	11.6	1.00	12.50	0	93.2	60	140			
Chlorobenzene	12.4	1.00	12.50	0	99.5	60	140			
1,1-Dichloroethene	13.9	1.00	12.50	0	111	60	140			
Trichloroethene (TCE)	10.5	1.00	12.50	0	84.3	60	140			
Surr: 1,2-Dichloroethane-d4	46.0		50.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.2	70	130			
Surr: Dibromofluoromethane	46.9		50.00		93.9	70	130			
Surr: Toluene-d8	42.8		50.00		85.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4233**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4233**	RunNo: **6186**			
Prep Date: **10/10/2012**	Analysis Date: **10/12/2012**	SeqNo: **178244**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4233** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4233** RunNo: **6186**
Prep Date: **10/10/2012** Analysis Date: **10/12/2012** SeqNo: **178244** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.8		3.330		84.7	21.3	145			
Surr: 2-Fluorobiphenyl	1.3		1.670		76.8	20	131			
Surr: 2-Fluorophenol	2.6		3.330		77.5	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		71.4	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		84.7	25.6	137			
Surr: Phenol-d5	3.1		3.330		92.6	20.3	132			

Sample ID **lcs-4233** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4233** RunNo: **6186**
Prep Date: **10/10/2012** Analysis Date: **10/12/2012** SeqNo: **178245** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4233** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4233** RunNo: **6186**
Prep Date: **10/10/2012** Analysis Date: **10/12/2012** SeqNo: **178245** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	74.2	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	77.5	43.8	89.1			
2-Chlorophenol	2.6	0.20	3.330	0	78.2	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	76.1	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	88.0	44.4	104			
N-Nitrosodi-n-propylamine	1.3	0.20	1.670	0	77.9	39.1	86.9			
4-Nitrophenol	2.7	0.25	3.330	0	80.1	44.2	107			
Pentachlorophenol	2.2	0.40	3.330	0	65.4	36.2	80			
Phenol	2.5	0.20	3.330	0	76.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	72.4	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	79.2	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.8		3.330		83.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.4		1.670		82.0	20	131			
Surr: 2-Fluorophenol	2.3		3.330		70.1	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		71.4	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		86.7	25.6	137			
Surr: Phenol-d5	2.8		3.330		82.9	20.3	132			

Sample ID **1210521-001Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-24 (0-0.5')** Batch ID: **4233** RunNo: **6186**
Prep Date: **10/10/2012** Analysis Date: **10/12/2012** SeqNo: **178519** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	0.99	1.659	0	89.8	38.6	100			
4-Chloro-3-methylphenol	2.9	2.5	3.309	0	87.7	35.8	108			
2-Chlorophenol	2.8	0.99	3.309	0	83.3	48.2	96.1			
1,4-Dichlorobenzene	1.2	0.99	1.659	0	75.0	42.5	97.6			
2,4-Dinitrotoluene	ND	2.5	1.659	0	93.1	51.2	108			
N-Nitrosodi-n-propylamine	1.4	0.99	1.659	0	83.8	31.6	114			
4-Nitrophenol	3.1	1.2	3.309	0	92.2	22.7	144			
Pentachlorophenol	ND	2.0	3.309	0	59.1	24	109			
Phenol	2.8	0.99	3.309	0	83.5	33.1	108			
Pyrene	1.4	0.99	1.659	0	83.6	42.7	98.9			
1,2,4-Trichlorobenzene	1.4	0.99	1.659	0	82.2	27.1	118			
Surr: 2,4,6-Tribromophenol	3.0		3.309		89.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.4		1.659		86.7	20	131			
Surr: 2-Fluorophenol	2.9		3.309		86.5	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		77.2	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.659		83.5	25.6	137			
Surr: Phenol-d5	3.0		3.309		91.1	20.3	132			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210521-001Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-24 (0-0.5')** Batch ID: **4233** RunNo: **6186**
Prep Date: **10/10/2012** Analysis Date: **10/12/2012** SeqNo: **178527** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.6	1.0	1.674	0	93.6	38.6	100	5.03	20	
4-Chloro-3-methylphenol	3.1	2.5	3.339	0	93.0	35.8	108	6.82	20	
2-Chlorophenol	2.8	1.0	3.339	0	84.1	48.2	96.1	1.85	20	
1,4-Dichlorobenzene	1.3	1.0	1.674	0	80.3	42.5	97.6	7.71	20	
2,4-Dinitrotoluene	ND	2.5	1.674	0	98.1	51.2	108	0	20	
N-Nitrosodi-n-propylamine	1.5	1.0	1.674	0	86.9	31.6	114	4.52	20	
4-Nitrophenol	3.3	1.3	3.339	0	99.6	22.7	144	8.57	20	
Pentachlorophenol	ND	2.0	3.339	0	59.1	24	109	0	20	
Phenol	2.7	1.0	3.339	0	81.1	33.1	108	1.96	20	
Pyrene	1.6	1.0	1.674	0	95.7	42.7	98.9	14.4	20	
1,2,4-Trichlorobenzene	1.5	1.0	1.674	0	87.1	27.1	118	6.67	20	
Surr: 2,4,6-Tribromophenol	3.0		3.339		88.8	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.674		87.7	20	131	0	0	
Surr: 2-Fluorophenol	2.8		3.339		85.2	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.674		79.0	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.5		1.674		88.2	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.339		88.9	20.3	132	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4314** SampType: **mblk** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180677** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4314** SampType: **lcs** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180678** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	100	80	120			

Sample ID **1210582-006CMS** SampType: **ms** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180706** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1669	0.01973	92.8	75	125			

Sample ID **1210582-006CMSD** SampType: **msd** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180707** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1660	0.01973	95.3	75	125	1.94	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4298** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180997** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4298** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181002** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	22	2.5	25.00	0	86.4	80	120			
Arsenic	26	2.5	25.00	0	105	80	120			
Barium	25	0.10	25.00	0	98.6	80	120			
Beryllium	26	0.15	25.00	0	104	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	25	0.30	25.00	0	98.3	80	120			
Cobalt	24	0.30	25.00	0	98.0	80	120			
Lead	25	0.25	25.00	0	102	80	120			
Manganese	24	0.10	25.00	0.03550	97.1	80	120			
Nickel	24	0.50	25.00	0	97.2	80	120			
Selenium	25	2.5	25.00	0	101	80	120			
Silver	5.1	0.25	5.000	0.06650	100	80	120			
Vanadium	25	2.5	25.00	0	100	80	120			
Zinc	25	2.5	25.00	0	101	80	120			

Sample ID **1210521-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-24 (0-0.5')** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.89	0	0	75	125			S
Arsenic	23	12	24.89	0	90.6	75	125			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210521**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210521-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-24 (0-0.5')** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	25	0.75	24.89	0.6775	98.5	75	125			
Cadmium	23	0.50	24.89	0	92.7	75	125			
Chromium	38	1.5	24.89	9.549	114	75	125			
Cobalt	28	1.5	24.89	5.096	90.8	75	125			
Lead	29	1.2	24.89	9.267	80.3	75	125			
Nickel	35	2.5	24.89	8.978	106	75	125			
Selenium	22	12	24.89	0	89.0	75	125			
Silver	4.5	1.2	4.978	0	90.5	75	125			
Vanadium	48	12	24.89	23.50	97.8	75	125			
Zinc	64	12	24.89	33.89	120	75	125			

Sample ID **1210521-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-24 (0-0.5')** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181046** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.80	0	0	75	125	0	20	S
Arsenic	22	12	24.80	0	88.1	75	125	3.10	20	
Beryllium	25	0.75	24.80	0.6775	97.4	75	125	1.43	20	
Cadmium	23	0.50	24.80	0	91.2	75	125	1.97	20	
Chromium	33	1.5	24.80	9.549	93.6	75	125	14.6	20	
Cobalt	26	1.5	24.80	5.096	84.8	75	125	5.79	20	
Lead	30	1.2	24.80	9.267	81.9	75	125	1.10	20	
Nickel	30	2.5	24.80	8.978	86.2	75	125	15.4	20	
Selenium	ND	12	24.80	0	0	75	125	200	20	SR
Silver	4.5	1.2	4.960	0	91.3	75	125	0.532	20	
Vanadium	50	12	24.80	23.50	108	75	125	5.11	20	
Zinc	54	12	24.80	33.89	80.8	75	125	16.9	20	

Sample ID **MB-4298** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4298** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181594** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID **LCS-4298** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4298** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181595** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0	106	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210521

Received by/date: LM 10/10/12

Logged By: **Michelle Garcia** 10/10/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/10/2012 8:54:43 AM Michelle Garcia

Reviewed By: ZTO 10/10/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

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

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Not Present			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.2

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210521	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/8/12	1605	SOIL	SWMU 1-24 (0-0.5')	2 VIALS	SOBI	-001										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
			SWMU 1-24 (0-0.5') DUP	2 VIALS	SOBI	-002										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1615		SWMU 1-24 (1.5-2')	2 VIALS	SOBI	-003										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1630		SWMU 1-24 (10.5-11.5')	2 VIALS	SOBI	-004										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/9/12	0700	[signature]	[signature]	10/10/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Chain-of-Custody Record

Client: WESTERN REFINING, SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler:
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210521	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/8/12	1640	SOIL	SWMU 1-24 (16-18')	2 VIALS	SOBI	-005										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1655		SWMU 1-24 (24-26')	2 VIALS	SOBI	-006										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1705		SWMU 1-24 (32-34')	2 VIALS	SOBI	-007										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	—	MEOH	MEOH BLANK	2 VIALS	MEOH	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/9/12	0700	[signature]	[signature]	10/10/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+Hg
+Cn

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

November 15, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210653

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 7 sample(s) on 10/12/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210653**
Date Reported: **11/15/2012**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:00:00 PM
Lab ID: 1210653-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	100	9.9		mg/Kg	1	10/15/2012 8:42:53 AM
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	10/15/2012 8:42:53 AM
Surr: DNOP	95.4	77.6-140		%REC	1	10/15/2012 8:42:53 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 5:03:50 AM
Surr: BFB	106	84-116		%REC	1	10/13/2012 5:03:50 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.051	0.033		mg/kg	1	10/16/2012 5:39:07 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
Barium	350	1.0		mg/Kg	10	10/25/2012 12:29:16 PM
Beryllium	0.85	0.30		mg/Kg	2	10/25/2012 9:46:22 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:46:22 AM
Chromium	17	0.60		mg/Kg	2	10/25/2012 9:46:22 AM
Cobalt	4.7	0.60		mg/Kg	2	10/25/2012 9:46:22 AM
Iron	18000	500		mg/Kg	500	11/2/2012 6:21:33 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 9:46:22 AM
Manganese	610	2.0		mg/Kg	20	10/25/2012 2:24:36 PM
Nickel	8.4	1.0		mg/Kg	2	10/25/2012 9:46:22 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:11:45 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
Zinc	22	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:00:00 PM
Lab ID: 1210653-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 11:01:42 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 11:01:42 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 11:01:42 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:00:00 PM
Lab ID: 1210653-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 11:01:42 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Surr: 2,4,6-Tribromophenol	85.3	21.3-145		%REC	1	10/21/2012 11:01:42 AM
Surr: 2-Fluorobiphenyl	86.3	20-131		%REC	1	10/21/2012 11:01:42 AM
Surr: 2-Fluorophenol	78.5	11.9-130		%REC	1	10/21/2012 11:01:42 AM
Surr: 4-Terphenyl-d14	83.1	25.1-149		%REC	1	10/21/2012 11:01:42 AM
Surr: Nitrobenzene-d5	92.0	25.6-137		%REC	1	10/21/2012 11:01:42 AM
Surr: Phenol-d5	80.4	20.3-132		%REC	1	10/21/2012 11:01:42 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00239	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Toluene	0.00454	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Ethylbenzene	0.00119	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Xylenes, Total	0.00526	0.00193		mg/Kg	1	10/12/2012 1:16:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2,4-Trimethylbenzene	0.00193	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,3,5-Trimethylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dichloroethane (EDC)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dibromoethane (EDB)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Naphthalene	ND	0.00193		mg/Kg	1	10/12/2012 1:16:16 PM
1-Methylnaphthalene	ND	0.00385		mg/Kg	1	10/12/2012 1:16:16 PM
2-Methylnaphthalene	ND	0.00385		mg/Kg	1	10/12/2012 1:16:16 PM
Acetone	0.109	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
Bromobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Bromodichloromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Bromoform	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Bromomethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
2-Butanone	0.0182	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
Carbon tetrachloride	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Chlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Chloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:00:00 PM
Lab ID: 1210653-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Chloromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
2-Chlorotoluene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Carbon disulfide	ND	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
4-Chlorotoluene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
cis-1,2-DCE	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
cis-1,3-Dichloropropene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dibromo-3-chloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Dibromochloromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Dibromomethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,3-Dichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,4-Dichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Dichlorodifluoromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1-Dichloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1-Dichloroethene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dichloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,3-Dichloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
2,2-Dichloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1-Dichloropropene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Hexachlorobutadiene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Isopropylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
4-Isopropyltoluene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Methylene chloride	ND	0.00289		mg/Kg	1	10/12/2012 1:16:16 PM
n-Butylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
2-Hexanone	ND	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
n-Propylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
sec-Butylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Styrene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
4-Methyl-2-pentanone	0.0116	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
tert-Butylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1,1,2-Tetrachloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1,2,2-Tetrachloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Tetrachloroethene (PCE)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
trans-1,2-DCE	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
trans-1,3-Dichloropropene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2,3-Trichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2,4-Trichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1,1-Trichloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1,2-Trichloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Trichloroethene (TCE)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Trichlorofluoromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:00:00 PM
Lab ID: 1210653-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Vinyl chloride	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%REC	1	10/12/2012 1:16:16 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/12/2012 1:16:16 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/12/2012 1:16:16 PM
Surr: Toluene-d8	91.2	70-130		%REC	1	10/12/2012 1:16:16 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:15:00 PM
Lab ID: 1210653-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	100	9.9		mg/Kg	1	10/15/2012 9:49:38 AM
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	10/15/2012 9:49:38 AM
Surr: DNOP	95.1	77.6-140		%REC	1	10/15/2012 9:49:38 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 5:32:35 AM
Surr: BFB	103	84-116		%REC	1	10/13/2012 5:32:35 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.054	0.033		mg/kg	1	10/16/2012 5:40:53 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
Barium	370	1.0		mg/Kg	10	10/25/2012 12:42:54 PM
Beryllium	0.79	0.30		mg/Kg	2	10/25/2012 9:51:37 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:51:37 AM
Chromium	24	0.60		mg/Kg	2	10/25/2012 9:51:37 AM
Cobalt	4.4	0.60		mg/Kg	2	10/25/2012 9:51:37 AM
Iron	16000	500		mg/Kg	500	11/2/2012 6:24:23 AM
Lead	3.1	0.50		mg/Kg	2	10/25/2012 9:51:37 AM
Manganese	570	2.0		mg/Kg	20	10/25/2012 2:27:00 PM
Nickel	7.6	1.0		mg/Kg	2	10/25/2012 9:51:37 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:27:29 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
Zinc	25	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Acenaphthylene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Aniline	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Anthracene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Azobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benz(a)anthracene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzo(a)pyrene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzo(b)fluoranthene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzo(g,h,i)perylene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzo(k)fluoranthene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
Benzyl alcohol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Bis(2-chloroethoxy)methane	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Bis(2-chloroethyl)ether	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Bis(2-chloroisopropyl)ether	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:15:00 PM
Lab ID: 1210653-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
4-Bromophenyl phenyl ether	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Butyl benzyl phthalate	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Carbazole	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
2-Chloronaphthalene	ND	0.51		mg/Kg	1	10/21/2012 12:29:49 PM
2-Chlorophenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
4-Chlorophenyl phenyl ether	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Chrysene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
Di-n-octyl phthalate	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
Dibenz(a,h)anthracene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Dibenzofuran	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
1,2-Dichlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
1,3-Dichlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
1,4-Dichlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
3,3´-Dichlorobenzidine	ND	0.51		mg/Kg	1	10/21/2012 12:29:49 PM
Diethyl phthalate	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Dimethyl phthalate	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2,4-Dichlorophenol	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
2,4-Dimethylphenol	ND	0.61		mg/Kg	1	10/21/2012 12:29:49 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
2,4-Dinitrophenol	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
Fluoranthene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Fluorene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Hexachlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Hexachlorobutadiene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Hexachlorocyclopentadiene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Hexachloroethane	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Indeno(1,2,3-cd)pyrene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
1-Methylnaphthalene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2-Methylnaphthalene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
3+4-Methylphenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
N-Nitrosodi-n-propylamine	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
N-Nitrosodiphenylamine	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Naphthalene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2-Nitroaniline	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:15:00 PM
Lab ID: 1210653-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
4-Nitroaniline	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
2-Nitrophenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
4-Nitrophenol	ND	0.51		mg/Kg	1	10/21/2012 12:29:49 PM
Pentachlorophenol	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
Phenanthrene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Phenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Pyrene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
1,2,4-Trichlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2,4,5-Trichlorophenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2,4,6-Trichlorophenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Surr: 2,4,6-Tribromophenol	96.2	21.3-145		%REC	1	10/21/2012 12:29:49 PM
Surr: 2-Fluorobiphenyl	89.1	20-131		%REC	1	10/21/2012 12:29:49 PM
Surr: 2-Fluorophenol	84.3	11.9-130		%REC	1	10/21/2012 12:29:49 PM
Surr: 4-Terphenyl-d14	89.0	25.1-149		%REC	1	10/21/2012 12:29:49 PM
Surr: Nitrobenzene-d5	102	25.6-137		%REC	1	10/21/2012 12:29:49 PM
Surr: Phenol-d5	82.5	20.3-132		%REC	1	10/21/2012 12:29:49 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00203	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Toluene	0.00259	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Ethylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Xylenes, Total	0.00305	0.00152		mg/Kg	1	10/12/2012 1:47:09 PM
Methyl tert-butyl ether (MTBE)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2,4-Trimethylbenzene	0.00112	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,3,5-Trimethylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dichloroethane (EDC)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dibromoethane (EDB)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Naphthalene	ND	0.00152		mg/Kg	1	10/12/2012 1:47:09 PM
1-Methylnaphthalene	ND	0.00304		mg/Kg	1	10/12/2012 1:47:09 PM
2-Methylnaphthalene	ND	0.00304		mg/Kg	1	10/12/2012 1:47:09 PM
Acetone	0.0745	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
Bromobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Bromodichloromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Bromoform	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Bromomethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
2-Butanone	0.00999	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
Carbon tetrachloride	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Chlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Chloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:15:00 PM
Lab ID: 1210653-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Chloromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
2-Chlorotoluene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Carbon disulfide	ND	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
4-Chlorotoluene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
cis-1,2-DCE	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
cis-1,3-Dichloropropene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dibromo-3-chloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Dibromochloromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Dibromomethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,3-Dichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,4-Dichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Dichlorodifluoromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1-Dichloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1-Dichloroethene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dichloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,3-Dichloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
2,2-Dichloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1-Dichloropropene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Hexachlorobutadiene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Isopropylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
4-Isopropyltoluene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Methylene chloride	ND	0.00228		mg/Kg	1	10/12/2012 1:47:09 PM
n-Butylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
2-Hexanone	ND	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
n-Propylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
sec-Butylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Styrene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
4-Methyl-2-pentanone	ND	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
tert-Butylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1,1,2-Tetrachloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1,2,2-Tetrachloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Tetrachloroethene (PCE)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
trans-1,2-DCE	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
trans-1,3-Dichloropropene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2,3-Trichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2,4-Trichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1,1-Trichloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1,2-Trichloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Trichloroethene (TCE)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Trichlorofluoromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:15:00 PM
Lab ID: 1210653-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Vinyl chloride	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	10/12/2012 1:47:09 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	1	10/12/2012 1:47:09 PM
Surr: Dibromofluoromethane	97.3	70-130		%REC	1	10/12/2012 1:47:09 PM
Surr: Toluene-d8	92.5	70-130		%REC	1	10/12/2012 1:47:09 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8-8.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:30:00 PM
Lab ID: 1210653-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/13/2012 3:25:45 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/13/2012 3:25:45 PM
Surr: DNOP	93.5	77.6-140		%REC	1	10/13/2012 3:25:45 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 6:01:17 AM
Surr: BFB	108	84-116		%REC	1	10/13/2012 6:01:17 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:42:39 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
Barium	130	1.0		mg/Kg	10	10/25/2012 12:47:59 PM
Beryllium	0.77	0.30		mg/Kg	2	10/25/2012 10:06:49 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:06:49 AM
Chromium	10	0.60		mg/Kg	2	10/25/2012 10:06:49 AM
Cobalt	4.1	0.60		mg/Kg	2	10/25/2012 10:06:49 AM
Iron	18000	500		mg/Kg	500	11/2/2012 6:27:16 AM
Lead	3.6	0.50		mg/Kg	2	10/25/2012 10:06:49 AM
Manganese	350	1.0		mg/Kg	10	10/25/2012 12:47:59 PM
Nickel	7.3	1.0		mg/Kg	2	10/25/2012 10:06:49 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:32:46 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
Zinc	16	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzoic acid	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8-8.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:30:00 PM
Lab ID: 1210653-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 9:35:54 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 9:35:54 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 9:35:54 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Isophorone	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2-Methylphenol	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8-8.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:30:00 PM
Lab ID: 1210653-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
Nitrobenzene	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 9:35:54 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Pyridine	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Surr: 2,4,6-Tribromophenol	76.3	21.3-145		%REC	1	10/20/2012 9:35:54 PM
Surr: 2-Fluorobiphenyl	85.2	20-131		%REC	1	10/20/2012 9:35:54 PM
Surr: 2-Fluorophenol	83.5	11.9-130		%REC	1	10/20/2012 9:35:54 PM
Surr: 4-Terphenyl-d14	79.6	25.1-149		%REC	1	10/20/2012 9:35:54 PM
Surr: Nitrobenzene-d5	91.7	25.6-137		%REC	1	10/20/2012 9:35:54 PM
Surr: Phenol-d5	89.2	20.3-132		%REC	1	10/20/2012 9:35:54 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00174	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Toluene	0.00109	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Ethylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Xylenes, Total	ND	0.00210		mg/Kg	1	10/12/2012 5:22:40 PM
Methyl tert-butyl ether (MTBE)	0.0101	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2,4-Trimethylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,3,5-Trimethylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dichloroethane (EDC)	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dibromoethane (EDB)	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Naphthalene	ND	0.00210		mg/Kg	1	10/12/2012 5:22:40 PM
1-Methylnaphthalene	ND	0.00420		mg/Kg	1	10/12/2012 5:22:40 PM
2-Methylnaphthalene	ND	0.00420		mg/Kg	1	10/12/2012 5:22:40 PM
Acetone	0.0133	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
Bromobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Bromodichloromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Bromoform	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Bromomethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
2-Butanone	ND	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
Carbon tetrachloride	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Chlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Chloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8-8.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:30:00 PM
Lab ID: 1210653-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Chloromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
2-Chlorotoluene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Carbon disulfide	ND	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
4-Chlorotoluene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
cis-1,2-DCE	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
cis-1,3-Dichloropropene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dibromo-3-chloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Dibromochloromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Dibromomethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,3-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,4-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Dichlorodifluoromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1-Dichloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1-Dichloroethene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dichloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,3-Dichloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
2,2-Dichloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1-Dichloropropene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Hexachlorobutadiene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Isopropylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
4-Isopropyltoluene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Methylene chloride	ND	0.00315		mg/Kg	1	10/12/2012 5:22:40 PM
n-Butylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
2-Hexanone	ND	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
n-Propylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
sec-Butylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Styrene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
4-Methyl-2-pentanone	ND	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
tert-Butylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1,1,2-Tetrachloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1,2,2-Tetrachloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Tetrachloroethene (PCE)	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
trans-1,2-DCE	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
trans-1,3-Dichloropropene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2,3-Trichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2,4-Trichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1,1-Trichloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1,2-Trichloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Trichloroethene (TCE)	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Trichlorofluoromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8-8.5')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:30:00 PM
Lab ID: 1210653-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Vinyl chloride	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%REC	1	10/12/2012 5:22:40 PM
Surr: 4-Bromofluorobenzene	90.6	70-130		%REC	1	10/12/2012 5:22:40 PM
Surr: Dibromofluoromethane	96.8	70-130		%REC	1	10/12/2012 5:22:40 PM
Surr: Toluene-d8	89.1	70-130		%REC	1	10/12/2012 5:22:40 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8.5-9')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:40:00 PM
Lab ID: 1210653-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/13/2012 3:50:51 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/13/2012 3:50:51 PM
Surr: DNOP	95.1	77.6-140		%REC	1	10/13/2012 3:50:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 6:58:44 AM
Surr: BFB	105	84-116		%REC	1	10/13/2012 6:58:44 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:44:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
Barium	130	1.0		mg/Kg	10	10/25/2012 12:54:40 PM
Beryllium	0.83	0.30		mg/Kg	2	10/25/2012 10:12:01 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:12:01 AM
Chromium	8.6	0.60		mg/Kg	2	10/25/2012 10:12:01 AM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 10:12:01 AM
Iron	16000	500		mg/Kg	500	11/2/2012 6:30:08 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 10:12:01 AM
Manganese	230	1.0		mg/Kg	10	10/25/2012 12:54:40 PM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 10:12:01 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:38:00 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
Zinc	13	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8.5-9')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:40:00 PM
Lab ID: 1210653-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 10:05:15 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 10:05:15 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 10:05:15 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Isophorone	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8.5-9')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:40:00 PM
Lab ID: 1210653-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 10:05:15 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Pyridine	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Surr: 2,4,6-Tribromophenol	82.8	21.3-145		%REC	1	10/20/2012 10:05:15 PM
Surr: 2-Fluorobiphenyl	92.7	20-131		%REC	1	10/20/2012 10:05:15 PM
Surr: 2-Fluorophenol	83.4	11.9-130		%REC	1	10/20/2012 10:05:15 PM
Surr: 4-Terphenyl-d14	81.7	25.1-149		%REC	1	10/20/2012 10:05:15 PM
Surr: Nitrobenzene-d5	97.4	25.6-137		%REC	1	10/20/2012 10:05:15 PM
Surr: Phenol-d5	90.8	20.3-132		%REC	1	10/20/2012 10:05:15 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00221	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Toluene	0.00179	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Ethylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Xylenes, Total	ND	0.00273		mg/Kg	1	10/12/2012 2:18:01 PM
Methyl tert-butyl ether (MTBE)	0.0444	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2,4-Trimethylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,3,5-Trimethylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dichloroethane (EDC)	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dibromoethane (EDB)	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Naphthalene	ND	0.00273		mg/Kg	1	10/12/2012 2:18:01 PM
1-Methylnaphthalene	ND	0.00546		mg/Kg	1	10/12/2012 2:18:01 PM
2-Methylnaphthalene	ND	0.00546		mg/Kg	1	10/12/2012 2:18:01 PM
Acetone	0.0148	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
Bromobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Bromodichloromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Bromoform	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Bromomethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
2-Butanone	ND	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
Carbon tetrachloride	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Chlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Chloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8.5-9')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:40:00 PM
Lab ID: 1210653-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Chloromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
2-Chlorotoluene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Carbon disulfide	ND	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
4-Chlorotoluene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
cis-1,2-DCE	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
cis-1,3-Dichloropropene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dibromo-3-chloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Dibromochloromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Dibromomethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,3-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,4-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Dichlorodifluoromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1-Dichloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1-Dichloroethene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dichloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,3-Dichloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
2,2-Dichloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1-Dichloropropene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Hexachlorobutadiene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Isopropylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
4-Isopropyltoluene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Methylene chloride	ND	0.00409		mg/Kg	1	10/12/2012 2:18:01 PM
n-Butylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
2-Hexanone	ND	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
n-Propylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
sec-Butylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Styrene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
4-Methyl-2-pentanone	ND	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
tert-Butylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1,1,2-Tetrachloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1,2,2-Tetrachloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Tetrachloroethene (PCE)	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
trans-1,2-DCE	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
trans-1,3-Dichloropropene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2,3-Trichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2,4-Trichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1,1-Trichloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1,2-Trichloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Trichloroethene (TCE)	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Trichlorofluoromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (8.5-9')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:40:00 PM
Lab ID: 1210653-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Vinyl chloride	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	10/12/2012 2:18:01 PM
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	1	10/12/2012 2:18:01 PM
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	10/12/2012 2:18:01 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/12/2012 2:18:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (12-13')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:55:00 PM
Lab ID: 1210653-005
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/13/2012 4:16:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/13/2012 4:16:00 PM
Surr: DNOP	96.3	77.6-140		%REC	1	10/13/2012 4:16:00 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 7:27:25 AM
Surr: BFB	110	84-116		%REC	1	10/13/2012 7:27:25 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:46:14 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
Barium	210	1.0		mg/Kg	10	10/25/2012 12:59:33 PM
Beryllium	0.72	0.30		mg/Kg	2	10/25/2012 10:17:05 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:17:05 AM
Chromium	15	0.60		mg/Kg	2	10/25/2012 10:17:05 AM
Cobalt	4.1	0.60		mg/Kg	2	10/25/2012 10:17:05 AM
Iron	15000	500		mg/Kg	500	11/2/2012 6:43:03 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 10:17:05 AM
Manganese	530	2.0		mg/Kg	20	10/25/2012 2:32:04 PM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 10:17:05 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:43:15 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
Zinc	16	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (12-13')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:55:00 PM
Lab ID: 1210653-005
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 8:07:34 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 8:07:34 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 8:07:34 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (12-13')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:55:00 PM
Lab ID: 1210653-005
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 8:07:34 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Surr: 2,4,6-Tribromophenol	93.7	21.3-145		%REC	1	10/21/2012 8:07:34 AM
Surr: 2-Fluorobiphenyl	88.9	20-131		%REC	1	10/21/2012 8:07:34 AM
Surr: 2-Fluorophenol	85.9	11.9-130		%REC	1	10/21/2012 8:07:34 AM
Surr: 4-Terphenyl-d14	90.4	25.1-149		%REC	1	10/21/2012 8:07:34 AM
Surr: Nitrobenzene-d5	105	25.6-137		%REC	1	10/21/2012 8:07:34 AM
Surr: Phenol-d5	87.5	20.3-132		%REC	1	10/21/2012 8:07:34 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00165	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Toluene	0.000948	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Ethylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Xylenes, Total	ND	0.00184		mg/Kg	1	10/12/2012 2:48:49 PM
Methyl tert-butyl ether (MTBE)	0.00957	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2,4-Trimethylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,3,5-Trimethylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dichloroethane (EDC)	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dibromoethane (EDB)	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Naphthalene	ND	0.00184		mg/Kg	1	10/12/2012 2:48:49 PM
1-Methylnaphthalene	ND	0.00368		mg/Kg	1	10/12/2012 2:48:49 PM
2-Methylnaphthalene	ND	0.00368		mg/Kg	1	10/12/2012 2:48:49 PM
Acetone	0.0141	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
Bromobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Bromodichloromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Bromoform	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Bromomethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
2-Butanone	ND	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
Carbon tetrachloride	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Chlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Chloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (12-13')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:55:00 PM
Lab ID: 1210653-005
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Chloromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
2-Chlorotoluene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Carbon disulfide	ND	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
4-Chlorotoluene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
cis-1,2-DCE	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
cis-1,3-Dichloropropene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dibromo-3-chloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Dibromochloromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Dibromomethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,3-Dichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,4-Dichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Dichlorodifluoromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1-Dichloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1-Dichloroethene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dichloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,3-Dichloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
2,2-Dichloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1-Dichloropropene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Hexachlorobutadiene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Isopropylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
4-Isopropyltoluene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Methylene chloride	ND	0.00276		mg/Kg	1	10/12/2012 2:48:49 PM
n-Butylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
2-Hexanone	ND	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
n-Propylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
sec-Butylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Styrene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
4-Methyl-2-pentanone	ND	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
tert-Butylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1,1,2-Tetrachloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1,2,2-Tetrachloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Tetrachloroethene (PCE)	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
trans-1,2-DCE	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
trans-1,3-Dichloropropene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2,3-Trichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2,4-Trichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1,1-Trichloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1,2-Trichloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Trichloroethene (TCE)	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Trichlorofluoromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (12-13')
Project: SWMU NO.1
Collection Date: 10/10/2012 5:55:00 PM
Lab ID: 1210653-005
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Vinyl chloride	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Surr: 1,2-Dichloroethane-d4	110	70-130		%REC	1	10/12/2012 2:48:49 PM
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	1	10/12/2012 2:48:49 PM
Surr: Dibromofluoromethane	112	70-130		%REC	1	10/12/2012 2:48:49 PM
Surr: Toluene-d8	90.1	70-130		%REC	1	10/12/2012 2:48:49 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (13-14')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:05:00 PM
Lab ID: 1210653-006
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/13/2012 4:41:24 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/13/2012 4:41:24 PM
Surr: DNOP	96.1	77.6-140		%REC	1	10/13/2012 4:41:24 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 6:38:09 PM
Surr: BFB	94.3	84-116		%REC	1	10/19/2012 6:38:09 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:55:24 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/25/2012 1:04:23 PM
Arsenic	ND	12		mg/Kg	5	10/25/2012 1:04:23 PM
Barium	280	1.0		mg/Kg	10	10/25/2012 1:06:48 PM
Beryllium	1.2	0.75		mg/Kg	5	10/25/2012 1:04:23 PM
Cadmium	ND	0.50		mg/Kg	5	10/25/2012 1:04:23 PM
Chromium	13	1.5		mg/Kg	5	10/25/2012 1:04:23 PM
Cobalt	6.0	1.5		mg/Kg	5	10/25/2012 1:04:23 PM
Iron	20000	500		mg/Kg	500	11/2/2012 6:45:53 AM
Lead	4.0	1.2		mg/Kg	5	10/25/2012 1:04:23 PM
Manganese	320	1.0		mg/Kg	10	10/25/2012 1:06:48 PM
Nickel	11	2.5		mg/Kg	5	10/25/2012 1:04:23 PM
Selenium	ND	12		mg/Kg	5	10/25/2012 1:04:23 PM
Silver	ND	1.3		mg/Kg	5	10/29/2012 2:48:38 PM
Vanadium	20	12		mg/Kg	5	10/25/2012 1:04:23 PM
Zinc	20	12		mg/Kg	5	10/25/2012 1:04:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzoic acid	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (13-14')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:05:00 PM
Lab ID: 1210653-006
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 10:34:36 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 10:34:36 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 10:34:36 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Isophorone	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2-Methylphenol	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (13-14')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:05:00 PM
Lab ID: 1210653-006
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
Nitrobenzene	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 10:34:36 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Pyridine	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Surr: 2,4,6-Tribromophenol	81.2	21.3-145		%REC	1	10/20/2012 10:34:36 PM
Surr: 2-Fluorobiphenyl	95.7	20-131		%REC	1	10/20/2012 10:34:36 PM
Surr: 2-Fluorophenol	79.8	11.9-130		%REC	1	10/20/2012 10:34:36 PM
Surr: 4-Terphenyl-d14	78.5	25.1-149		%REC	1	10/20/2012 10:34:36 PM
Surr: Nitrobenzene-d5	97.8	25.6-137		%REC	1	10/20/2012 10:34:36 PM
Surr: Phenol-d5	92.6	20.3-132		%REC	1	10/20/2012 10:34:36 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00157	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Toluene	0.00127	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Ethylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Xylenes, Total	ND	0.00168		mg/Kg	1	10/12/2012 3:19:36 PM
Methyl tert-butyl ether (MTBE)	0.00477	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2,4-Trimethylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,3,5-Trimethylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dichloroethane (EDC)	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dibromoethane (EDB)	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Naphthalene	ND	0.00168		mg/Kg	1	10/12/2012 3:19:36 PM
1-Methylnaphthalene	ND	0.00336		mg/Kg	1	10/12/2012 3:19:36 PM
2-Methylnaphthalene	ND	0.00336		mg/Kg	1	10/12/2012 3:19:36 PM
Acetone	0.0148	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
Bromobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Bromodichloromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Bromoform	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Bromomethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
2-Butanone	ND	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
Carbon tetrachloride	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Chlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Chloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (13-14')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:05:00 PM
Lab ID: 1210653-006
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Chloromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
2-Chlorotoluene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Carbon disulfide	ND	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
4-Chlorotoluene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
cis-1,2-DCE	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
cis-1,3-Dichloropropene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dibromo-3-chloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Dibromochloromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Dibromomethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,3-Dichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,4-Dichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Dichlorodifluoromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1-Dichloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1-Dichloroethene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dichloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,3-Dichloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
2,2-Dichloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1-Dichloropropene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Hexachlorobutadiene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Isopropylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
4-Isopropyltoluene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Methylene chloride	ND	0.00252		mg/Kg	1	10/12/2012 3:19:36 PM
n-Butylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
2-Hexanone	ND	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
n-Propylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
sec-Butylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Styrene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
4-Methyl-2-pentanone	ND	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
tert-Butylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1,1,2-Tetrachloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1,2,2-Tetrachloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Tetrachloroethene (PCE)	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
trans-1,2-DCE	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
trans-1,3-Dichloropropene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2,3-Trichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2,4-Trichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1,1-Trichloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1,2-Trichloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Trichloroethene (TCE)	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Trichlorofluoromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (13-14')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:05:00 PM
Lab ID: 1210653-006
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Vinyl chloride	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	10/12/2012 3:19:36 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	1	10/12/2012 3:19:36 PM
Surr: Dibromofluoromethane	92.8	70-130		%REC	1	10/12/2012 3:19:36 PM
Surr: Toluene-d8	88.4	70-130		%REC	1	10/12/2012 3:19:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (17-18')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:20:00 PM
Lab ID: 1210653-007
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/13/2012 5:06:26 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/13/2012 5:06:26 PM
Surr: DNOP	94.9	77.6-140		%REC	1	10/13/2012 5:06:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 7:06:58 PM
Surr: BFB	89.2	84-116		%REC	1	10/19/2012 7:06:58 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:57:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/25/2012 1:20:11 PM
Arsenic	ND	12		mg/Kg	5	10/25/2012 1:20:11 PM
Barium	870	5.0		mg/Kg	50	10/25/2012 1:22:36 PM
Beryllium	1.0	0.75		mg/Kg	5	10/25/2012 1:20:11 PM
Cadmium	ND	0.50		mg/Kg	5	10/25/2012 1:20:11 PM
Chromium	13	1.5		mg/Kg	5	10/25/2012 1:20:11 PM
Cobalt	6.2	1.5		mg/Kg	5	10/25/2012 1:20:11 PM
Iron	24000	1000		mg/Kg	1000	11/2/2012 6:48:43 AM
Lead	5.0	1.2		mg/Kg	5	10/25/2012 1:20:11 PM
Manganese	1400	5.0		mg/Kg	50	10/25/2012 1:22:36 PM
Nickel	12	2.5		mg/Kg	5	10/25/2012 1:20:11 PM
Selenium	ND	12		mg/Kg	5	10/25/2012 1:20:11 PM
Silver	ND	1.2		mg/Kg	5	10/29/2012 3:03:53 PM
Vanadium	16	12		mg/Kg	5	10/25/2012 1:20:11 PM
Zinc	21	12		mg/Kg	5	10/25/2012 1:20:11 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (17-18')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:20:00 PM
Lab ID: 1210653-007
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 11:03:55 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 11:03:55 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 11:03:55 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Isophorone	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (17-18')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:20:00 PM
Lab ID: 1210653-007
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 11:03:55 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Pyridine	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Surr: 2,4,6-Tribromophenol	76.4	21.3-145		%REC	1	10/20/2012 11:03:55 PM
Surr: 2-Fluorobiphenyl	87.2	20-131		%REC	1	10/20/2012 11:03:55 PM
Surr: 2-Fluorophenol	76.7	11.9-130		%REC	1	10/20/2012 11:03:55 PM
Surr: 4-Terphenyl-d14	73.6	25.1-149		%REC	1	10/20/2012 11:03:55 PM
Surr: Nitrobenzene-d5	89.0	25.6-137		%REC	1	10/20/2012 11:03:55 PM
Surr: Phenol-d5	80.7	20.3-132		%REC	1	10/20/2012 11:03:55 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.0106	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Toluene	0.00740	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Ethylbenzene	0.00187	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Xylenes, Total	0.00597	0.00161		mg/Kg	1	10/12/2012 3:50:25 PM
Methyl tert-butyl ether (MTBE)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2,4-Trimethylbenzene	0.00196	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,3,5-Trimethylbenzene	0.00122	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dichloroethane (EDC)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dibromoethane (EDB)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Naphthalene	ND	0.00161		mg/Kg	1	10/12/2012 3:50:25 PM
1-Methylnaphthalene	ND	0.00322		mg/Kg	1	10/12/2012 3:50:25 PM
2-Methylnaphthalene	ND	0.00322		mg/Kg	1	10/12/2012 3:50:25 PM
Acetone	0.0127	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
Bromobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Bromodichloromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Bromoform	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Bromomethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
2-Butanone	ND	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
Carbon tetrachloride	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Chlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Chloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (17-18')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:20:00 PM
Lab ID: 1210653-007
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Chloromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
2-Chlorotoluene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Carbon disulfide	ND	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
4-Chlorotoluene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
cis-1,2-DCE	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
cis-1,3-Dichloropropene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dibromo-3-chloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Dibromochloromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Dibromomethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,3-Dichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,4-Dichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Dichlorodifluoromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1-Dichloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1-Dichloroethene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dichloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,3-Dichloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
2,2-Dichloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1-Dichloropropene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Hexachlorobutadiene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Isopropylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
4-Isopropyltoluene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Methylene chloride	ND	0.00242		mg/Kg	1	10/12/2012 3:50:25 PM
n-Butylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
2-Hexanone	ND	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
n-Propylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
sec-Butylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Styrene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
4-Methyl-2-pentanone	ND	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
tert-Butylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1,1,2-Tetrachloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1,2,2-Tetrachloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Tetrachloroethene (PCE)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
trans-1,2-DCE	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
trans-1,3-Dichloropropene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2,3-Trichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2,4-Trichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1,1-Trichloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1,2-Trichloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Trichloroethene (TCE)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Trichlorofluoromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 (17-18')
Project: SWMU NO.1
Collection Date: 10/10/2012 6:20:00 PM
Lab ID: 1210653-007
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Vinyl chloride	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	10/12/2012 3:50:25 PM
Surr: 4-Bromofluorobenzene	90.4	70-130		%REC	1	10/12/2012 3:50:25 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/12/2012 3:50:25 PM
Surr: Toluene-d8	92.0	70-130		%REC	1	10/12/2012 3:50:25 PM

Qualifiers:

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

Anatek Labs, Inc.

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

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

Batch #: 121017006
Project Name: 1210653

Analytical Results Report

Sample Number 121017006-001 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210653-001D / SWMU 1-37 (0-0.5) **Sampling Time** 5:00 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	3.2	Percent		10/26/2012	CRW	%moisture	

Sample Number 121017006-002 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210653-002D / SWMU 1-37 (1.5-2) **Sampling Time** 5:15 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	10.9	Percent		10/26/2012	CRW	%moisture	

Sample Number 121017006-003 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210653-003D / SWMU 1-37 (8-8.5) **Sampling Time** 5:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	14.8	Percent		10/26/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

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

Batch #: 121017006
Project Name: 1210653

Analytical Results Report

Sample Number 121017006-004 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210653-004D / SWMU 1-37 (8.5-9) **Sampling Time** 5:40 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	19.9	Percent		10/26/2012	CRW	%moisture	

Sample Number 121017006-005 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210653-005D / SWMU 1-37 (12-13) **Sampling Time** 5:55 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	24.2	Percent		10/26/2012	CRW	%moisture	

Sample Number 121017006-006 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210653-006D / SWMU 1-37 (13-14) **Sampling Time** 6:05 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	17.4	Percent		10/26/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	121017006
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1210653
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	121017006-007	**Sampling Date**	10/10/2012	**Date/Time Received**	10/16/2012 1:11 PM
Client Sample ID	1210653-007D / SWMU 1-37 (17-18)			**Sampling Time**	6:20 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	14.4	Percent		10/30/2012	CRW	%moisture	

Authorized Signature

John Coddington, Lab Manager

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

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

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4283** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4283** RunNo: **6213**
Prep Date: **10/12/2012** Analysis Date: **10/13/2012** SeqNo: **179030** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		91.2	77.6	140			

Sample ID **LCS-4283** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4283** RunNo: **6213**
Prep Date: **10/12/2012** Analysis Date: **10/13/2012** SeqNo: **179032** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.6	52.6	130			
Surr: DNOP	4.1		5.000		81.4	77.6	140			

Sample ID **1210653-001CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-37 (0-0.5')** Batch ID: **4283** RunNo: **6226**
Prep Date: **10/12/2012** Analysis Date: **10/15/2012** SeqNo: **179425** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	10	51.18	103.8	-4.05	57.2	146			S
Surr: DNOP	3.9		5.118		75.7	77.6	140			S

Sample ID **1210653-001CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-37 (0-0.5')** Batch ID: **4283** RunNo: **6226**
Prep Date: **10/12/2012** Analysis Date: **10/15/2012** SeqNo: **179426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	120	10	49.80	103.8	32.2	57.2	146	16.4	24.5	S
Surr: DNOP	4.2		4.980		84.5	77.6	140	0	0	

Sample ID **MB-4297** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4297** RunNo: **6226**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **179526** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.9	77.6	140			

Sample ID **LCS-4297** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4297** RunNo: **6226**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **179527** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.5	77.6	140			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178737** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178738** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID **1210582-004BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178751** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.2	5.0	18.26	0	39.3	70	130			S
Surr: BFB	780		730.5		107	84	116			

Sample ID **1210582-004BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178752** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	18.26	0	87.4	70	130	76.0	22.1	R
Surr: BFB	800		730.5		109	84	116	0	0	

Sample ID **B27** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178761** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	84	116			

Sample ID **2.5UG GRO LCS-II** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **178762** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	74	117			
Surr: BFB	1100		1000		112	84	116			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210653-005BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-37 (12-13')** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178768** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	70	130			
Surr: BFB	1100		1000		113	84	116			

Sample ID **1210653-005BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-37 (12-13')** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178769** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	70	130	7.96	22.1	
Surr: BFB	1200		1000		117	84	116	0	0	S

Sample ID **MB-4282** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4282** RunNo: **6371**
Prep Date: **10/12/2012** Analysis Date: **10/19/2012** SeqNo: **183155** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.4	84	116			

Sample ID **LCS-4282** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4282** RunNo: **6371**
Prep Date: **10/12/2012** Analysis Date: **10/19/2012** SeqNo: **183156** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.8	74	117			
Surr: BFB	960		1000		96.4	84	116			

Sample ID **1210668-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4282** RunNo: **6371**
Prep Date: **10/12/2012** Analysis Date: **10/19/2012** SeqNo: **183162** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	24	23.63	6.612	71.0	70	130			
Surr: BFB	4500		4726		96.1	84	116			

Sample ID **1210668-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4282** RunNo: **6371**
Prep Date: **10/12/2012** Analysis Date: **10/19/2012** SeqNo: **183163** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	24	23.61	6.612	65.0	70	130	0	22.1	S
Surr: BFB	4300		4721		90.4	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4280**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4280**	RunNo: **6223**			
Prep Date: **10/12/2012**	Analysis Date: **10/12/2012**	SeqNo: **179318**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4280** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4280** RunNo: **6223**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179318** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.9		50.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.3	70	130			
Surr: Dibromofluoromethane	49.4		50.00		98.8	70	130			
Surr: Toluene-d8	46.4		50.00		92.9	70	130			

Sample ID **lcs-4280** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4280** RunNo: **6223**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **180404** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12.3	1.00	12.50	0	98.3	60	140			
Toluene	11.6	1.00	12.50	0	93.2	60	140			
Chlorobenzene	12.4	1.00	12.50	0	99.5	60	140			
1,1-Dichloroethene	13.9	1.00	12.50	0	111	60	140			
Trichloroethene (TCE)	10.5	1.00	12.50	0	84.3	60	140			
Surr: 1,2-Dichloroethane-d4	46.0		50.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.2	70	130			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4280**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4280**	RunNo:	**6223**
Prep Date:	**10/12/2012**	Analysis Date:	**10/12/2012**	SeqNo:	**180404** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.9		50.00		93.9	70	130			
Surr: Toluene-d8	42.8		50.00		85.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4304**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4304**	RunNo: **6287**			
Prep Date: **10/15/2012**	Analysis Date: **10/16/2012**	SeqNo: **181172**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4304** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181172** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.3		3.330		99.2	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		87.3	20	131			
Surr: 2-Fluorophenol	2.9		3.330		86.6	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		77.7	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		86.0	25.6	137			
Surr: Phenol-d5	2.8		3.330		85.1	20.3	132			

Sample ID **lcs-4304** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181173** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4304** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181173** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	0.20	1.670	0	87.0	49.7	98.1			
4-Chloro-3-methylphenol	2.8	0.50	3.330	0	83.9	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	70.1	41.1	96.9			
1,4-Dichlorobenzene	1.2	0.20	1.670	0	70.8	41	97.4			
2,4-Dinitrotoluene	1.8	0.50	1.670	0	107	44.4	104			S
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	84.8	39.1	86.9			
4-Nitrophenol	2.9	0.25	3.330	0	87.7	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.0	36.2	80			
Phenol	2.5	0.20	3.330	0	76.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	71.1	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	79.0	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		98.8	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		89.8	20	131			
Surr: 2-Fluorophenol	2.5		3.330		75.9	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		74.2	25.1	149			
Surr: Nitrobenzene-d5	1.5		1.670		90.6	25.6	137			
Surr: Phenol-d5	2.8		3.330		84.9	20.3	132			

Sample ID **mb-4337** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183352** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.2		3.330		95.0	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		88.8	20	131			
Surr: 2-Fluorophenol	2.5		3.330		75.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		76.8	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		84.4	25.6	137			
Surr: Phenol-d5	2.6		3.330		78.4	20.3	132			

Sample ID **lcs-4337** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183353** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		89.9	20	131			
Surr: 2-Fluorophenol	2.4		3.330		71.3	11.9	130			
Surr: 4-Terphenyl-d14	1.4		1.670		85.9	25.1	149			
Surr: Nitrobenzene-d5	1.6		1.670		93.1	25.6	137			
Surr: Phenol-d5	2.9		3.330		86.8	20.3	132			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210653-001CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-37 (0-0.5')** Batch ID: **4304** RunNo: **6376**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183387** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.40	1.664	0	74.7	25.6	142			
4-Chloro-3-methylphenol	2.6	1.0	3.318	0	78.7	63.7	100			
2-Chlorophenol	2.4	0.40	3.318	0	73.0	22.2	126			
1,4-Dichlorobenzene	1.1	0.40	1.664	0	69.0	12.4	115			
2,4-Dinitrotoluene	1.3	1.0	1.664	0	78.8	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.40	1.664	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.50	3.318	0	73.6	36.7	130			
Pentachlorophenol	2.2	0.80	3.318	0	66.4	15.8	113			
Phenol	2.5	0.40	3.318	0	73.9	25.1	124			
Pyrene	1.5	0.40	1.664	0	88.1	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.40	1.664	0	82.7	30	113			
Surr: 2,4,6-Tribromophenol	3.3		3.318		101	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.664		94.0	20	131			
Surr: 2-Fluorophenol	2.9		3.318		88.7	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.664		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.664		103	25.6	137			
Surr: Phenol-d5	3.2		3.318		97.8	20.3	132			

Sample ID **1210692-010CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183388** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.3		3.350		97.8	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.680		94.5	20	131			
Surr: 2-Fluorophenol	2.7		3.350		79.9	11.9	130			
Surr: 4-Terphenyl-d14	1.4		1.680		83.3	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.680		104	25.6	137			
Surr: Phenol-d5	3.1		3.350		93.0	20.3	132			

Sample ID **1210653-001CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-37 (0-0.5')** Batch ID: **4304** RunNo: **6376**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183389** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.40	1.672	0	75.2	25.6	142	1.09	22	
4-Chloro-3-methylphenol	2.4	1.0	3.334	0	73.0	63.7	100	7.05	27.3	
2-Chlorophenol	2.3	0.40	3.334	0	67.8	22.2	126	6.86	26.3	
1,4-Dichlorobenzene	1.0	0.40	1.672	0	61.9	12.4	115	10.4	27.4	
2,4-Dinitrotoluene	1.3	1.0	1.672	0	77.2	14.9	142	1.50	27.4	
N-Nitrosodi-n-propylamine	1.3	0.40	1.672	0	75.4	13.9	136	7.14	22.6	
4-Nitrophenol	2.4	0.50	3.334	0	73.4	36.7	130	0.281	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210653-001CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-37 (0-0.5')** Batch ID: **4304** RunNo: **6376**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183389** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Pentachlorophenol	2.2	0.80	3.334	0	66.2	15.8	113	0.258	27.1	
Phenol	2.1	0.40	3.334	0	62.9	25.1	124	15.6	32.2	
Pyrene	1.3	0.40	1.672	0	79.2	35.8	124	10.1	29.5	
1,2,4-Trichlorobenzene	1.3	0.40	1.672	0	80.6	30	113	2.14	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.334		92.3	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.672		87.3	20	131	0	0	
Surr: 2-Fluorophenol	2.8		3.334		83.7	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.672		84.8	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.5		1.672		91.5	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.334		88.5	20.3	132	0	0	

Sample ID **1210692-010CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183390** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.2		3.332		97.1	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.6		1.671		98.0	20	131	0	0	
Surr: 2-Fluorophenol	2.6		3.332		76.9	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.671		78.6	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.7		1.671		101	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.332		89.3	20.3	132	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4317** SampType: **mblk** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180708** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4317** SampType: **lcs** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180709** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.7	80	120			

Sample ID **1210656-004CMS** SampType: **ms** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180735** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1654	0	96.4	75	125			

Sample ID **1210656-004CMSD** SampType: **msd** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180736** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1655	0	96.8	75	125	0.493	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4440** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186820** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	0.64	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4440** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186821** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0.6605	96.6	80	120			
Arsenic	25	2.5	25.00	0	102	80	120			
Barium	25	0.10	25.00	0	98.6	80	120			
Beryllium	26	0.15	25.00	0	103	80	120			
Cadmium	25	0.10	25.00	0	98.8	80	120			
Chromium	25	0.30	25.00	0	99.0	80	120			
Cobalt	24	0.30	25.00	0	95.6	80	120			
Lead	24	0.25	25.00	0	96.6	80	120			
Manganese	24	0.10	25.00	0.05400	96.6	80	120			
Nickel	24	0.50	25.00	0	94.2	80	120			
Selenium	24	2.5	25.00	0	94.1	80	120			
Silver	6.0	0.25	5.000	0.6425	106	80	120			B
Vanadium	25	2.5	25.00	0	102	80	120			
Zinc	24	2.5	25.00	0	97.3	80	120			

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.93	2.265	83.0	75	125			
Cadmium	20	0.10	24.93	0.03505	80.0	75	125			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	25	0.30	24.93	3.270	86.6	75	125			
Selenium	17	2.5	24.93	0	68.1	75	125			S

Sample ID **1210771-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186849** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.96	2.265	81.7	75	125	1.34	20	
Cadmium	19	0.10	24.96	0.03505	77.2	75	125	3.39	20	
Chromium	24	0.30	24.96	3.270	84.2	75	125	2.39	20	
Selenium	15	2.5	24.96	0	61.4	75	125	10.1	20	S

Sample ID **MB-4440** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188992** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID **LCS-4440** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188993** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.7	0.25	5.000	0	113	80	120			

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **189043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.3	0.25	4.987	0	85.5	75	125			

Sample ID **1210771-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **189044** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.0	0.25	4.992	0	80.9	75	125	5.39	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210653**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4440**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**4440**	RunNo:	**6670**
Prep Date:	**10/22/2012**	Analysis Date:	**11/2/2012**	SeqNo:	**192431** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	**LCS-4440**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**4440**	RunNo:	**6670**
Prep Date:	**10/22/2012**	Analysis Date:	**11/2/2012**	SeqNo:	**192432** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	109	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1210653**

Received by/date: MG 10/12/12

Logged By: **Michelle Garcia** 10/12/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/12/2012 9:20:33 AM Michelle Garcia

Reviewed By: TO 10/12/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

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

Chain-of-Custody Record

Client: WESTERN REFINING SW INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210653	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/10/12	1700	SOIL	SWMU 1-37 (0-0.5')	2 VIALS	SOBI	-001										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1715		SWMU 1-37 (1.5-2')	2 VIALS	SOBI	-002										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1730		SWMU 1-37 (8-8.5')	2 VIALS	SOBI	-003										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1740		SWMU 1-37 (8.5-9')	2 VIALS	SOBI	-004										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/11/12	0735	[signature]	Michelle Garcia	10/12/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Chain-of-Custody Record

Client: WESTERN REFINING SW INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

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Analysis Request

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10/10/12	1755	SOIL	SWMU 1-37(12-13')	2 VIALS	SOBI	-005										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1805		SWMU 1-37(13-14')	2 VIALS	SOBI	-006										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1820		SWMU 1-37(17-18')	2 VIALS	SOBI	-007										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/11/12	0735	[signature]	Michelle Garcia	10/12/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cn

Hall Environmental Analysis Laboratory
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Website: www.hallenvironmental.com

November 19, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210660

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 4 sample(s) on 10/12/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-001
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	1.9	1.0		mg/L	1	10/12/2012 5:00:43 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/12/2012 5:00:43 PM
Surr: DNOP	114	79.5-166		%REC	1	10/12/2012 5:00:43 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	13	0.50	*	mg/L	5	10/13/2012 8:47:09 PM
Chloride	1500	100		mg/L	200	10/16/2012 10:15:00 PM
Sulfate	110	2.5		mg/L	5	10/13/2012 8:47:09 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	17	0.080	*	mg/L	20	10/23/2012 1:08:09 PM
Beryllium	0.032	0.0040	*	mg/L	1	10/19/2012 8:36:07 PM
Cadmium	ND	0.0040		mg/L	1	10/19/2012 8:36:07 PM
Chromium	0.14	0.012	*	mg/L	1	10/19/2012 8:36:07 PM
Cobalt	0.11	0.012		mg/L	1	10/19/2012 8:36:07 PM
Iron	160	4.0	*	mg/L	100	10/23/2012 1:11:21 PM
Manganese	43	0.40	*	mg/L	100	10/23/2012 1:11:21 PM
Nickel	0.21	0.020	*	mg/L	1	10/19/2012 8:36:07 PM
Silver	ND	0.010		mg/L	1	10/19/2012 8:36:07 PM
Vanadium	0.20	0.10		mg/L	1	10/19/2012 8:36:07 PM
Zinc	0.27	0.020		mg/L	1	10/19/2012 8:36:07 PM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0050		mg/L	2.5	10/24/2012 4:54:26 PM
Arsenic	0.052	0.0050	*	mg/L	2.5	10/24/2012 4:54:26 PM
Lead	0.49	0.010	*	mg/L	5	10/25/2012 11:03:24 AM
Selenium	0.023	0.0050		mg/L	2.5	11/12/2012 7:32:44 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	0.00022	0.00020		mg/L	1	10/24/2012 7:30:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Acenaphthylene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Aniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Anthracene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Azobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benz(a)anthracene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzoic acid	ND	20		µg/L	1	10/16/2012 3:23:26 PM
Benzyl alcohol	ND	10		µg/L	1	10/16/2012 3:23:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-001
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Carbazole	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Chloroaniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2-Chlorophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Chrysene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Dibenzofuran	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Diethyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Dimethyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/16/2012 3:23:26 PM
2,4-Dimethylphenol	230	10		µg/L	1	10/16/2012 3:23:26 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/16/2012 3:23:26 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/16/2012 3:23:26 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Fluoranthene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Fluorene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Hexachlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Hexachloroethane	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Isophorone	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1-Methylnaphthalene	10	10		µg/L	1	10/16/2012 3:23:26 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2-Methylphenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
3+4-Methylphenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/16/2012 3:23:26 PM

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Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/16/2012 3:23:26 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Naphthalene	11	10		µg/L	1	10/16/2012 3:23:26 PM
2-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
3-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Nitrobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2-Nitrophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Nitrophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Pentachlorophenol	ND	20		µg/L	1	10/16/2012 3:23:26 PM
Phenanthrene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Phenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Pyrene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Pyridine	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Surr: 2,4,6-Tribromophenol	81.9	44.2-126		%REC	1	10/16/2012 3:23:26 PM
Surr: 2-Fluorobiphenyl	69.7	37-114		%REC	1	10/16/2012 3:23:26 PM
Surr: 2-Fluorophenol	55.0	23.4-98		%REC	1	10/16/2012 3:23:26 PM
Surr: 4-Terphenyl-d14	68.1	41.3-116		%REC	1	10/16/2012 3:23:26 PM
Surr: Nitrobenzene-d5	74.1	39.5-118		%REC	1	10/16/2012 3:23:26 PM
Surr: Phenol-d5	49.5	20.9-95.9		%REC	1	10/16/2012 3:23:26 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	20	5.0		µg/L	5	10/17/2012 8:29:42 PM
Toluene	18	5.0		µg/L	5	10/17/2012 8:29:42 PM
Ethylbenzene	8.9	5.0		µg/L	5	10/17/2012 8:29:42 PM
Methyl tert-butyl ether (MTBE)	65	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2,4-Trimethylbenzene	15	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Naphthalene	22	10		µg/L	5	10/17/2012 8:29:42 PM
1-Methylnaphthalene	ND	20		µg/L	5	10/17/2012 8:29:42 PM
2-Methylnaphthalene	ND	20		µg/L	5	10/17/2012 8:29:42 PM
Acetone	52	50		µg/L	5	10/17/2012 8:29:42 PM
Bromobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Bromodichloromethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Bromoform	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Bromomethane	ND	15		µg/L	5	10/17/2012 8:29:42 PM
2-Butanone	ND	50		µg/L	5	10/17/2012 8:29:42 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-001
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	50		µg/L	5	10/17/2012 8:29:42 PM
Carbon Tetrachloride	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Chlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Chloroethane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
Chloroform	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Chloromethane	ND	15		µg/L	5	10/17/2012 8:29:42 PM
2-Chlorotoluene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
4-Chlorotoluene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
cis-1,2-DCE	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
Dibromochloromethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Dibromomethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Dichlorodifluoromethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1-Dichloroethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1-Dichloroethene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dichloropropane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,3-Dichloropropane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
2,2-Dichloropropane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
1,1-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Hexachlorobutadiene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
2-Hexanone	ND	50		µg/L	5	10/17/2012 8:29:42 PM
Isopropylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
4-Isopropyltoluene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	10/17/2012 8:29:42 PM
Methylene Chloride	ND	15		µg/L	5	10/17/2012 8:29:42 PM
n-Butylbenzene	ND	15		µg/L	5	10/17/2012 8:29:42 PM
n-Propylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
sec-Butylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Styrene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
tert-Butylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
trans-1,2-DCE	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-001
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Trichloroethene (TCE)	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Trichlorofluoromethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2,3-Trichloropropane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
Vinyl chloride	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Xylenes, Total	38	7.5		µg/L	5	10/17/2012 8:29:42 PM
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	5	10/17/2012 8:29:42 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	5	10/17/2012 8:29:42 PM
Surr: Dibromofluoromethane	93.5	70-130		%REC	5	10/17/2012 8:29:42 PM
Surr: Toluene-d8	93.9	70-130		%REC	5	10/17/2012 8:29:42 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	1.9	0.25		mg/L	5	10/20/2012 4:11:59 PM
Surr: BFB	94.0	70-130		%REC	5	10/20/2012 4:11:59 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW DUP
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-002
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	1.9	1.0		mg/L	1	10/12/2012 5:25:56 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/12/2012 5:25:56 PM
Surr: DNOP	113	79.5-166		%REC	1	10/12/2012 5:25:56 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	13	0.50	*	mg/L	5	10/13/2012 9:11:58 PM
Chloride	1500	100		mg/L	200	10/16/2012 10:27:24 PM
Sulfate	100	2.5		mg/L	5	10/13/2012 9:11:58 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	20	0.080	*	mg/L	20	10/23/2012 1:26:06 PM
Beryllium	0.032	0.0040	*	mg/L	1	10/19/2012 8:55:06 PM
Cadmium	ND	0.0040		mg/L	1	10/19/2012 8:55:06 PM
Chromium	0.16	0.012	*	mg/L	1	10/19/2012 8:55:06 PM
Cobalt	0.11	0.012		mg/L	1	10/19/2012 8:55:06 PM
Iron	180	4.0	*	mg/L	100	10/23/2012 1:29:50 PM
Manganese	39	0.080	*	mg/L	20	10/23/2012 1:26:06 PM
Nickel	0.21	0.020	*	mg/L	1	10/19/2012 8:55:06 PM
Silver	ND	0.010		mg/L	1	10/19/2012 8:55:06 PM
Vanadium	0.18	0.10		mg/L	1	10/19/2012 8:55:06 PM
Zinc	0.28	0.020		mg/L	1	10/19/2012 8:55:06 PM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0050		mg/L	2.5	10/24/2012 4:58:22 PM
Arsenic	0.058	0.0050	*	mg/L	2.5	10/24/2012 4:58:22 PM
Lead	0.55	0.020	*	mg/L	10	10/25/2012 11:23:04 AM
Selenium	0.020	0.0050		mg/L	2.5	11/12/2012 7:34:36 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	0.00027	0.00020		mg/L	1	10/24/2012 7:32:00 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Acenaphthylene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Aniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Anthracene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Azobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benz(a)anthracene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzoic acid	ND	20		µg/L	1	10/16/2012 3:53:35 PM
Benzyl alcohol	ND	10		µg/L	1	10/16/2012 3:53:35 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW DUP
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-002
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Carbazole	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Chloroaniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2-Chlorophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Chrysene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Di-n-butyl phthalate	11	10		µg/L	1	10/16/2012 3:53:35 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Dibenzofuran	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Diethyl phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Dimethyl phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/16/2012 3:53:35 PM
2,4-Dimethylphenol	260	20		µg/L	2	10/20/2012 9:06:37 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/16/2012 3:53:35 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/16/2012 3:53:35 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Fluoranthene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Fluorene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Hexachlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Hexachloroethane	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Isophorone	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1-Methylnaphthalene	11	10		µg/L	1	10/16/2012 3:53:35 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2-Methylphenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
3+4-Methylphenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/16/2012 3:53:35 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW DUP
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-002
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/16/2012 3:53:35 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Naphthalene	12	10		µg/L	1	10/16/2012 3:53:35 PM
2-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
3-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Nitrobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2-Nitrophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Nitrophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Pentachlorophenol	ND	20		µg/L	1	10/16/2012 3:53:35 PM
Phenanthrene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Phenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Pyrene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Pyridine	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Surr: 2,4,6-Tribromophenol	83.7	44.2-126		%REC	1	10/16/2012 3:53:35 PM
Surr: 2-Fluorobiphenyl	75.7	37-114		%REC	1	10/16/2012 3:53:35 PM
Surr: 2-Fluorophenol	58.4	23.4-98		%REC	1	10/16/2012 3:53:35 PM
Surr: 4-Terphenyl-d14	64.7	41.3-116		%REC	1	10/16/2012 3:53:35 PM
Surr: Nitrobenzene-d5	75.9	39.5-118		%REC	1	10/16/2012 3:53:35 PM
Surr: Phenol-d5	49.8	20.9-95.9		%REC	1	10/16/2012 3:53:35 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	19	5.0		µg/L	5	10/17/2012 10:22:32 PM
Toluene	19	5.0		µg/L	5	10/17/2012 10:22:32 PM
Ethylbenzene	8.8	5.0		µg/L	5	10/17/2012 10:22:32 PM
Methyl tert-butyl ether (MTBE)	70	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2,4-Trimethylbenzene	14	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Naphthalene	21	10		µg/L	5	10/17/2012 10:22:32 PM
1-Methylnaphthalene	ND	20		µg/L	5	10/17/2012 10:22:32 PM
2-Methylnaphthalene	ND	20		µg/L	5	10/17/2012 10:22:32 PM
Acetone	64	50		µg/L	5	10/17/2012 10:22:32 PM
Bromobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Bromodichloromethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Bromoform	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Bromomethane	ND	15		µg/L	5	10/17/2012 10:22:32 PM
2-Butanone	ND	50		µg/L	5	10/17/2012 10:22:32 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW DUP
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-002
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	50		µg/L	5	10/17/2012 10:22:32 PM
Carbon Tetrachloride	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Chlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Chloroethane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
Chloroform	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Chloromethane	ND	15		µg/L	5	10/17/2012 10:22:32 PM
2-Chlorotoluene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
4-Chlorotoluene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
cis-1,2-DCE	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
Dibromochloromethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Dibromomethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Dichlorodifluoromethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1-Dichloroethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1-Dichloroethene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dichloropropane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,3-Dichloropropane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
2,2-Dichloropropane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
1,1-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Hexachlorobutadiene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
2-Hexanone	ND	50		µg/L	5	10/17/2012 10:22:32 PM
Isopropylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
4-Isopropyltoluene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	10/17/2012 10:22:32 PM
Methylene Chloride	ND	15		µg/L	5	10/17/2012 10:22:32 PM
n-Butylbenzene	ND	15		µg/L	5	10/17/2012 10:22:32 PM
n-Propylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
sec-Butylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Styrene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
tert-Butylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
trans-1,2-DCE	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-24 GW DUP
Project: SWMU NO.1
Collection Date: 10/10/2012 10:15:00 AM
Lab ID: 1210660-002
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Trichloroethene (TCE)	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Trichlorofluoromethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2,3-Trichloropropane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
Vinyl chloride	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Xylenes, Total	36	7.5		µg/L	5	10/17/2012 10:22:32 PM
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%REC	5	10/17/2012 10:22:32 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	5	10/17/2012 10:22:32 PM
Surr: Dibromofluoromethane	91.6	70-130		%REC	5	10/17/2012 10:22:32 PM
Surr: Toluene-d8	94.4	70-130		%REC	5	10/17/2012 10:22:32 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	1.9	0.25		mg/L	5	10/20/2012 6:05:32 PM
Surr: BFB	98.6	70-130		%REC	5	10/20/2012 6:05:32 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210660-003
Matrix: TRIP BLANK
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 12:15:16 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 12:15:16 AM
Acetone	ND	10		µg/L	1	10/18/2012 12:15:16 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 12:15:16 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 12:15:16 AM
Carbon disulfide	ND	10		µg/L	1	10/18/2012 12:15:16 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 12:15:16 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 12:15:16 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210660-003
Matrix: TRIP BLANK
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 12:15:16 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 12:15:16 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 12:15:16 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 12:15:16 AM
Surr: 1,2-Dichloroethane-d4	89.9	70-130		%REC	1	10/18/2012 12:15:16 AM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	1	10/18/2012 12:15:16 AM
Surr: Dibromofluoromethane	93.5	70-130		%REC	1	10/18/2012 12:15:16 AM
Surr: Toluene-d8	96.3	70-130		%REC	1	10/18/2012 12:15:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 7:02:36 PM
Surr: BFB	100	70-130		%REC	1	10/20/2012 7:02:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101012
Project: SWMU NO.1
Collection Date: 10/10/2012 6:45:00 PM
Lab ID: 1210660-004
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/12/2012 5:51:00 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/12/2012 5:51:00 PM
Surr: DNOP	112	79.5-166		%REC	1	10/12/2012 5:51:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	ND	0.10		mg/L	1	10/13/2012 8:22:19 PM
Chloride	ND	0.50		mg/L	1	10/13/2012 8:22:19 PM
Sulfate	ND	0.50		mg/L	1	10/13/2012 8:22:19 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	10/17/2012 9:10:57 PM
Beryllium	ND	0.0020		mg/L	1	10/17/2012 9:10:57 PM
Cadmium	ND	0.0020		mg/L	1	10/17/2012 9:10:57 PM
Chromium	ND	0.0060		mg/L	1	10/17/2012 9:10:57 PM
Cobalt	ND	0.0060		mg/L	1	10/17/2012 9:10:57 PM
Iron	ND	0.020		mg/L	1	10/18/2012 2:03:15 PM
Manganese	ND	0.0020		mg/L	1	10/17/2012 9:10:57 PM
Nickel	ND	0.010		mg/L	1	10/17/2012 9:10:57 PM
Silver	ND	0.0050		mg/L	1	10/17/2012 9:10:57 PM
Vanadium	ND	0.050		mg/L	1	10/17/2012 9:10:57 PM
Zinc	ND	0.010		mg/L	1	10/17/2012 9:10:57 PM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/25/2012 6:54:33 PM
Arsenic	ND	0.0010		mg/L	1	10/25/2012 6:54:33 PM
Lead	ND	0.0010		mg/L	1	10/25/2012 6:54:33 PM
Selenium	ND	0.0010		mg/L	1	10/25/2012 6:54:33 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:33:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Acenaphthylene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Aniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Anthracene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Azobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benz(a)anthracene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzoic acid	ND	20		µg/L	1	10/16/2012 4:23:30 PM
Benzyl alcohol	ND	10		µg/L	1	10/16/2012 4:23:30 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101012
Project: SWMU NO.1
Collection Date: 10/10/2012 6:45:00 PM
Lab ID: 1210660-004
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Carbazole	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Chloroaniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Chlorophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Chrysene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Dibenzofuran	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Diethyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Dimethyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/16/2012 4:23:30 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/16/2012 4:23:30 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/16/2012 4:23:30 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Fluoranthene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Fluorene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Hexachlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Hexachloroethane	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Isophorone	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Methylphenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
3+4-Methylphenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/16/2012 4:23:30 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101012
Project: SWMU NO.1
Collection Date: 10/10/2012 6:45:00 PM
Lab ID: 1210660-004
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/16/2012 4:23:30 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Naphthalene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Nitroaniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
3-Nitroaniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Nitroaniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Nitrobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Nitrophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Nitrophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Pentachlorophenol	ND	20		µg/L	1	10/16/2012 4:23:30 PM
Phenanthrene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Phenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Pyrene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Pyridine	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Surr: 2,4,6-Tribromophenol	83.9	44.2-126		%REC	1	10/16/2012 4:23:30 PM
Surr: 2-Fluorobiphenyl	67.2	37-114		%REC	1	10/16/2012 4:23:30 PM
Surr: 2-Fluorophenol	53.6	23.4-98		%REC	1	10/16/2012 4:23:30 PM
Surr: 4-Terphenyl-d14	73.0	41.3-116		%REC	1	10/16/2012 4:23:30 PM
Surr: Nitrobenzene-d5	76.8	39.5-118		%REC	1	10/16/2012 4:23:30 PM
Surr: Phenol-d5	44.7	20.9-95.9		%REC	1	10/16/2012 4:23:30 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 12:43:20 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 12:43:20 AM
Acetone	ND	10		µg/L	1	10/18/2012 12:43:20 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 12:43:20 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 12:43:20 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101012
Project: SWMU NO.1
Collection Date: 10/10/2012 6:45:00 PM
Lab ID: 1210660-004
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	10		µg/L	1	10/18/2012 12:43:20 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 12:43:20 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 12:43:20 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 12:43:20 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 12:43:20 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 12:43:20 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101012
Project: SWMU NO.1
Collection Date: 10/10/2012 6:45:00 PM
Lab ID: 1210660-004
Matrix: AQUEOUS
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 12:43:20 AM
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%REC	1	10/18/2012 12:43:20 AM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	1	10/18/2012 12:43:20 AM
Surr: Dibromofluoromethane	92.4	70-130		%REC	1	10/18/2012 12:43:20 AM
Surr: Toluene-d8	95.0	70-130		%REC	1	10/18/2012 12:43:20 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 7:30:51 PM
Surr: BFB	95.6	70-130		%REC	1	10/20/2012 7:30:51 PM

Qualifiers:

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

Anatek Labs, Inc.

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

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

Batch #: 121016063
Project Name: 1210660

Analytical Results Report

Sample Number 121016063-001
Client Sample ID 1210660-001F / SWMU 1-24 GW
Matrix Water
Comments
Sampling Date 10/10/2012
Sample Location
Date/Time Received 10/16/2012 1:00 PM
Sampling Time 10:15 AM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0587	mg/L	0.01	10/24/2012	CRW	EPA 335.4	

Sample Number 121016063-002
Client Sample ID 1210660-002F / SWMU 1-24 GW DUP
Matrix Water
Comments
Sampling Date 10/10/2012
Sample Location
Date/Time Received 10/16/2012 1:00 PM
Sampling Time 10:15 AM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0806	mg/L	0.01	10/24/2012	CRW	EPA 335.4	

Sample Number 121016063-003
Client Sample ID 1210660-004F / EB101012
Matrix Water
Comments
Sampling Date 10/10/2012
Sample Location
Date/Time Received 10/16/2012 1:00 PM
Sampling Time 6:45 PM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/24/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

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

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

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181711** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	101	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	98.9	85	115			
Cobalt	0.49	0.0060	0.5000	0	97.1	85	115			
Manganese	0.49	0.0020	0.5000	0	98.1	85	115			
Nickel	0.48	0.010	0.5000	0	95.9	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.52	0.050	0.5000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	98.4	85	115			

Sample ID **1210572-018AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181754** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	101	70	130			
Chromium	0.47	0.0060	0.5000	0	95.0	70	130			
Nickel	0.45	0.010	0.5000	0.001290	90.7	70	130			
Zinc	0.46	0.010	0.5000	0	92.7	70	130			

Sample ID **1210572-018AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181755** Units: **mg/L**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210572-018AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181755** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	99.7	70	130	1.02	20	
Chromium	0.47	0.0060	0.5000	0	93.9	70	130	1.11	20	
Nickel	0.46	0.010	0.5000	0.001290	92.0	70	130	1.48	20	
Zinc	0.46	0.010	0.5000	0	91.7	70	130	1.09	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182483** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182484** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.1	85	115			

Sample ID **1210513-001AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182578** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	100	70	130			

Sample ID **1210513-001AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182579** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.8	70	130	1.41	20	

Sample ID **MB-4388** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183397** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4388** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183397** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS-4388** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183398** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.9	85	115			
Beryllium	0.52	0.0020	0.5000	0	104	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	97.1	85	115			
Cobalt	0.47	0.0060	0.5000	0	93.3	85	115			
Iron	0.47	0.020	0.5000	0	94.4	85	115			
Manganese	0.47	0.0020	0.5000	0	93.4	85	115			
Nickel	0.46	0.010	0.5000	0	92.2	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Vanadium	0.51	0.050	0.5000	0	102	85	115			
Zinc	0.48	0.010	0.5000	0	95.3	85	115			

Sample ID **1210692-027DMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183451** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.45	0.0020	0.5000	0.001070	90.6	70	130			
Beryllium	0.49	0.0020	0.5000	0	97.3	70	130			
Cadmium	0.48	0.0020	0.5000	0	95.6	70	130			
Chromium	0.46	0.0060	0.5000	0	91.5	70	130			
Cobalt	0.43	0.0060	0.5000	0	86.4	70	130			
Manganese	0.45	0.0020	0.5000	0.001780	89.2	70	130			
Nickel	0.42	0.010	0.5000	0.001690	83.9	70	130			
Silver	0.095	0.0050	0.1000	0	94.9	70	130			
Vanadium	0.49	0.050	0.5000	0	98.2	70	130			
Zinc	0.42	0.010	0.5000	0	83.3	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210692-027DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183452** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.46	0.0020	0.5000	0.001070	91.1	70	130	0.538	20	
Beryllium	0.49	0.0020	0.5000	0	97.1	70	130	0.126	20	
Cadmium	0.48	0.0020	0.5000	0	95.8	70	130	0.190	20	
Chromium	0.46	0.0060	0.5000	0	91.8	70	130	0.347	20	
Cobalt	0.43	0.0060	0.5000	0	86.8	70	130	0.490	20	
Manganese	0.45	0.0020	0.5000	0.001780	89.7	70	130	0.617	20	
Nickel	0.42	0.010	0.5000	0.001690	84.4	70	130	0.521	20	
Silver	0.098	0.0050	0.1000	0	98.2	70	130	3.36	20	
Vanadium	0.49	0.050	0.5000	0	98.2	70	130	0.0244	20	
Zinc	0.42	0.010	0.5000	0	83.9	70	130	0.765	20	

Sample ID **1210692-027DMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **4388** RunNo: **6431**
Prep Date: **10/18/2012** Analysis Date: **10/23/2012** SeqNo: **184811** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.60	0.020	0.5000	0.1311	92.9	70	130			

Sample ID **1210692-027DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **4388** RunNo: **6431**
Prep Date: **10/18/2012** Analysis Date: **10/23/2012** SeqNo: **184812** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.60	0.020	0.5000	0.1311	94.6	70	130	1.40	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4388** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **4388** RunNo: **6368**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183111** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								

Sample ID **1209C98-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186650** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.031	0.0010	0.02500	0.005774	102	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186664** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186665** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	104	85	115			
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Lead	0.027	0.0010	0.02500	0	106	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186667** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186668** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1210516-002BMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187056** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	102	70	130			
Lead	0.029	0.0010	0.02500	0.002703	104	70	130			
Selenium	0.026	0.0010	0.02500	0	102	70	130			

Sample ID **1210544-001CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187059** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.2	70	130			
Arsenic	0.027	0.0010	0.02500	0.001693	101	70	130			
Selenium	0.026	0.0010	0.02500	0.001046	100	70	130			

Sample ID **1210724-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187071** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.048	0.0010	0.02500	0.02319	99.5	70	130			

Sample ID **1210724-010AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187081** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.029	0.0010	0.02500	0.004033	101	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187100** Units: **mg/L**

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.9	85	115			
Arsenic	0.025	0.0010	0.02500	0	100	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187101** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.2	85	115			
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187102** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187103** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB-4738** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **4738** RunNo: **6848**
Prep Date: **11/8/2012** Analysis Date: **11/12/2012** SeqNo: **198392** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0025								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4503** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186274** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-4503** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186276** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.2	80	120			

Sample ID **1210675-003BMS** SampType: **ms** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186299** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	83.0	75	125			

Sample ID **1210675-003BMSD** SampType: **msd** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186300** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0	80.1	75	125	3.62	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6232** RunNo: **6232**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **179591** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6232** RunNo: **6232**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **179592** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	95.5	90	110			
Chloride	4.9	0.50	5.000	0	97.6	90	110			
Sulfate	9.8	0.50	10.00	0	97.9	90	110			

Sample ID **1210676-008AMSx1** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6232** RunNo: **6232**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **179594** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	4.9	1.0	5.000	0.3890	90.3	76.6	110			

Sample ID **1210676-008AMSDx** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6232** RunNo: **6232**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **179595** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	4.9	1.0	5.000	0.3890	90.1	76.6	110	0.204	20	

Sample ID **1210676-011AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6232** RunNo: **6232**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **179603** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.3	0.10	0.5000	1.108	33.5	76.6	110			S

Sample ID **1210676-011AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6232** RunNo: **6232**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **179604** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.3	0.10	0.5000	1.108	34.3	76.6	110	0.321	20	S

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**						
Client ID:	**PBW**	Batch ID:	**R6279**	RunNo:	**6279**						
Prep Date:		Analysis Date:	**10/16/2012**	SeqNo:	**180866**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	0.50								

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**						
Client ID:	**LCSW**	Batch ID:	**R6279**	RunNo:	**6279**						
Prep Date:		Analysis Date:	**10/16/2012**	SeqNo:	**180867**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.7	0.50	5.000	0	94.5	90	110			

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**						
Client ID:	**PBW**	Batch ID:	**R6279**	RunNo:	**6279**						
Prep Date:		Analysis Date:	**10/17/2012**	SeqNo:	**180926**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	0.50								

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**						
Client ID:	**LCSW**	Batch ID:	**R6279**	RunNo:	**6279**						
Prep Date:		Analysis Date:	**10/17/2012**	SeqNo:	**180927**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.8	0.50	5.000	0	95.0	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4284** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **PBW** Batch ID: **4284** RunNo: **6179**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **178640** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		110	79.5	166			

Sample ID **LCS-4284** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSW** Batch ID: **4284** RunNo: **6179**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **178642** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.5	1.0	5.000	0	89.4	74	157			
Surr: DNOP	0.46		0.5000		92.8	79.5	166			

Sample ID **LCSD-4284** SampType: **LCSD** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSS02** Batch ID: **4284** RunNo: **6179**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **178643** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.2	1.0	5.000	0	83.9	74	157	6.29	23	
Surr: DNOP	0.51		0.5000		103	79.5	166	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb-b**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6340**	RunNo: **6340**			
Prep Date:	Analysis Date: **10/17/2012**	SeqNo: **182455**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb-b** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6340** RunNo: **6340**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182455** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.8	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6340** RunNo: **6340**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182457** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	105	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	107	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	94.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6340** RunNo: **6340**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182457** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.6		10.00		95.7	70	130			
Surr: Toluene-d8	9.6		10.00		96.4	70	130			

Sample ID **1210660-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 1-24 GW** Batch ID: **R6340** RunNo: **6340**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182459** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	130	5.0	100.0	19.53	115	66.8	128			
Toluene	120	5.0	100.0	18.25	100	70	130			
Chlorobenzene	99	5.0	100.0	0	98.8	70	130			
1,1-Dichloroethene	110	5.0	100.0	0	109	70	130			
Trichloroethene (TCE)	94	5.0	100.0	0	94.0	70	130			
Surr: 1,2-Dichloroethane-d4	45		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	47		50.00		94.9	70	130			
Surr: Dibromofluoromethane	47		50.00		94.8	70	130			
Surr: Toluene-d8	47		50.00		94.4	70	130			

Sample ID **1210660-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 1-24 GW** Batch ID: **R6340** RunNo: **6340**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182460** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	130	5.0	100.0	19.53	107	66.8	128	6.17	16.7	
Toluene	110	5.0	100.0	18.25	93.5	70	130	5.64	18.7	
Chlorobenzene	98	5.0	100.0	0	98.5	70	130	0.270	19.5	
1,1-Dichloroethene	100	5.0	100.0	0	104	70	130	4.23	16.7	
Trichloroethene (TCE)	92	5.0	100.0	0	91.9	70	130	2.26	17.5	
Surr: 1,2-Dichloroethane-d4	46		50.00		92.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	48		50.00		96.8	70	130	0	0	
Surr: Dibromofluoromethane	47		50.00		94.3	70	130	0	0	
Surr: Toluene-d8	47		50.00		94.8	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**mb-4322**	SampType:	**MBLK**	TestCode:	**EPA Method 8270C: Semivolatiles**		
Client ID:	**PBW**	Batch ID:	**4322**	RunNo:	**6287**		
Prep Date:	**10/16/2012**	Analysis Date:	**10/16/2012**	SeqNo:	**181174**	Units:	**µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**mb-4322**	SampType:	**MBLK**	TestCode:	**EPA Method 8270C: Semivolatiles**				
Client ID:	**PBW**	Batch ID:	**4322**	RunNo:	**6287**				
Prep Date:	**10/16/2012**	Analysis Date:	**10/16/2012**	SeqNo:	**181174**	Units:	**µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	140		200.0		71.8	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		86.2	37	114			
Surr: 2-Fluorophenol	110		200.0		56.3	23.4	98			
Surr: 4-Terphenyl-d14	76		100.0		75.8	41.3	116			
Surr: Nitrobenzene-d5	98		100.0		97.6	39.5	118			
Surr: Phenol-d5	100		200.0		52.2	20.9	95.9			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4322** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **4322** RunNo: **6287**
Prep Date: **10/16/2012** Analysis Date: **10/16/2012** SeqNo: **181175** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	77.2	38.2	99.4			
4-Chloro-3-methylphenol	170	10	200.0	0	85.8	35.5	108			
2-Chlorophenol	150	10	200.0	0	74.2	29.8	106			
1,4-Dichlorobenzene	57	10	100.0	0	57.1	32.6	91.5			
2,4-Dinitrotoluene	98	10	100.0	0	98.4	44.7	112			
N-Nitrosodi-n-propylamine	89	10	100.0	0	88.6	38.5	105			
4-Nitrophenol	75	10	200.0	0	37.6	11.6	73.1			
Pentachlorophenol	86	20	200.0	0	42.8	20.2	93			
Phenol	92	10	200.0	0	46.2	23	66.1			
Pyrene	76	10	100.0	0	76.1	40.1	101			
1,2,4-Trichlorobenzene	66	10	100.0	0	65.6	37.7	99.1			
Surr: 2,4,6-Tribromophenol	170		200.0		85.9	44.2	126			
Surr: 2-Fluorobiphenyl	79		100.0		78.9	37	114			
Surr: 2-Fluorophenol	120		200.0		58.0	23.4	98			
Surr: 4-Terphenyl-d14	81		100.0		80.7	41.3	116			
Surr: Nitrobenzene-d5	85		100.0		84.6	39.5	118			
Surr: Phenol-d5	100		200.0		52.3	20.9	95.9			

Sample ID **lcsd-4322** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **4322** RunNo: **6287**
Prep Date: **10/16/2012** Analysis Date: **10/16/2012** SeqNo: **181176** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	78	10	100.0	0	77.9	38.2	99.4	0.980	20	
4-Chloro-3-methylphenol	180	10	200.0	0	88.1	35.5	108	2.61	20	
2-Chlorophenol	150	10	200.0	0	76.6	29.8	106	3.08	20	
1,4-Dichlorobenzene	60	10	100.0	0	59.6	32.6	91.5	4.28	20	
2,4-Dinitrotoluene	110	10	100.0	0	106	44.7	112	7.64	20	
N-Nitrosodi-n-propylamine	89	10	100.0	0	88.7	38.5	105	0.113	20	
4-Nitrophenol	100	10	200.0	0	50.4	11.6	73.1	28.9	20	R
Pentachlorophenol	110	20	200.0	0	55.0	20.2	93	25.2	20	R
Phenol	97	10	200.0	0	48.6	23	66.1	5.21	20	
Pyrene	81	10	100.0	0	81.0	40.1	101	6.19	20	
1,2,4-Trichlorobenzene	66	10	100.0	0	66.3	37.7	99.1	0.970	20	
Surr: 2,4,6-Tribromophenol	190		200.0		93.8	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	82		100.0		81.6	37	114	0	0	
Surr: 2-Fluorophenol	120		200.0		60.8	23.4	98	0	0	
Surr: 4-Terphenyl-d14	78		100.0		78.5	41.3	116	0	0	
Surr: Nitrobenzene-d5	86		100.0		85.7	39.5	118	0	0	
Surr: Phenol-d5	110		200.0		53.9	20.9	95.9	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210660**
19-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **b6** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184074** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		95.8	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184077** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	86.2	85	115			
Surr: BFB	10		10.00		99.9	70	130			

Sample ID **1210660-001ams** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-24 GW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184078** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.0	0.25	2.500	1.915	82.1	70	130			
Surr: BFB	46		50.00		91.6	70	130			

Sample ID **1210660-001amsd** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-24 GW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184079** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3.8	0.25	2.500	1.915	76.4	70	130	3.70	20	
Surr: BFB	51		50.00		102	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1210660**

Received by/date: MG 10/12/12

Logged By: **Michelle Garcia** 10/12/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/12/2012 9:45:55 AM Michelle Garcia

Reviewed By: MG / 10/12/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? ~~Yes ☑~~ No ☑
10. Was preservative added to bottles? Yes ☐ ~~No ☑~~ NA ☐

-001E - ADDED 2mL HNO_3 -002E - ADDED 2mL HNO_3 FOR ACCEPTABLE pH - 10/12/12

11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 3 3 (<2 or >12 unless noted)

Adjusted? YES

Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

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

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210660	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/10/12	1015	GW	SWMU 1-24 GW	6 VOA	HCL	-001										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			
			SWMU 1-24 GW DUP	6 VOA	HCL	-002										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			
10/10/12	—	W	TRIP BLANK	3 VOA	HCL	-003										X						

Date	Time	Relinquished by:	Received by:	Date	Time
10/11/12	0735	[signature]	[signature]	10/12/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Chain-of-Custody Record

Client: WESTERN REFINING SW INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH- RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name:
Project #: SWMU No. 1
Project Manager: SCOTT CROUCH- RPS
Sampler: TRACY PAYNE- RPS
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210660	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
~~10/10/12~~ 10/10/12	1845	W	EB101012	6 VOA	HCL	-004										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/11/12	0735	[signature]	[signature]	10/12/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cn
+ Anions

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

November 19, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210692

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 29 sample(s) on 10/13/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210692**
Date Reported: **11/19/2012**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-001
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 2:24:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 2:24:10 PM
Surr: DNOP	92.3	77.6-140		%REC	1	10/16/2012 2:24:10 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.038	0.033		mg/kg	1	10/23/2012 4:41:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
Barium	740	2.0		mg/Kg	20	11/2/2012 7:24:51 AM
Beryllium	0.71	0.30		mg/Kg	2	10/25/2012 9:11:00 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:11:00 PM
Chromium	19	0.60		mg/Kg	2	10/25/2012 9:11:00 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 9:11:00 PM
Iron	15000	500		mg/Kg	500	11/2/2012 7:27:16 AM
Lead	2.6	0.50		mg/Kg	2	10/25/2012 9:11:00 PM
Manganese	650	2.0		mg/Kg	20	11/2/2012 7:24:51 AM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 9:11:00 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 9:11:00 PM
Vanadium	22	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
Zinc	22	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-001
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 7:10:04 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 7:10:04 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 7:10:04 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-001
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 7:10:04 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Surr: 2,4,6-Tribromophenol	54.6	21.3-145		%REC	1	10/21/2012 7:10:04 AM
Surr: 2-Fluorobiphenyl	62.8	20-131		%REC	1	10/21/2012 7:10:04 AM
Surr: 2-Fluorophenol	50.4	11.9-130		%REC	1	10/21/2012 7:10:04 AM
Surr: 4-Terphenyl-d14	67.4	25.1-149		%REC	1	10/21/2012 7:10:04 AM
Surr: Nitrobenzene-d5	65.1	25.6-137		%REC	1	10/21/2012 7:10:04 AM
Surr: Phenol-d5	54.6	20.3-132		%REC	1	10/21/2012 7:10:04 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00137	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Toluene	0.00197	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Ethylbenzene	0.0448	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Xylenes, Total	0.279	0.00162	E	mg/Kg	1	10/15/2012 1:49:48 PM
Methyl tert-butyl ether (MTBE)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,4-Trimethylbenzene	0.00140	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,3,5-Trimethylbenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dichloroethane (EDC)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dibromoethane (EDB)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Naphthalene	ND	0.00162		mg/Kg	1	10/15/2012 1:49:48 PM
1-Methylnaphthalene	ND	0.00324		mg/Kg	1	10/15/2012 1:49:48 PM
2-Methylnaphthalene	ND	0.00324		mg/Kg	1	10/15/2012 1:49:48 PM
Acetone	3.31	0.00810	E	mg/Kg	1	10/15/2012 1:49:48 PM
Bromobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Bromodichloromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Bromoform	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Bromomethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
2-Butanone	0.0220	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Carbon tetrachloride	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Chlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Chloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Chloroform	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Chloromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
2-Chlorotoluene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-001
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
4-Chlorotoluene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
cis-1,2-DCE	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
cis-1,3-Dichloropropene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dibromo-3-chloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Dibromochloromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Dibromomethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,3-Dichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,4-Dichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Dichlorodifluoromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloroethene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dichloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,3-Dichloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
2,2-Dichloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloropropene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Hexachlorobutadiene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Isopropylbenzene	0.00210	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
4-Isopropyltoluene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Methylene chloride	ND	0.00243		mg/Kg	1	10/15/2012 1:49:48 PM
n-Butylbenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
2-Hexanone	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
n-Propylbenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
sec-Butylbenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Styrene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
4-Methyl-2-pentanone	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
tert-Butylbenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,1,2-Tetrachloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,2,2-Tetrachloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Tetrachloroethene (PCE)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
trans-1,2-DCE	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
trans-1,3-Dichloropropene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,3-Trichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,4-Trichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,1-Trichloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,2-Trichloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Trichloroethene (TCE)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Trichlorofluoromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,3-Trichloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Vinyl chloride	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Surr: 1,2-Dichloroethane-d4	88.1	70-130		%REC	1	10/15/2012 1:49:48 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-001
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	10/15/2012 1:49:48 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/15/2012 1:49:48 PM
Surr: Toluene-d8	87.1	70-130		%REC	1	10/15/2012 1:49:48 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 2:47:27 PM
Surr: BFB	88.8	70-130		%REC	1	10/21/2012 2:47:27 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-002 **Matrix:** SOIL **Received Date:** 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 2:49:37 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 2:49:37 PM
Surr: DNOP	93.8	77.6-140		%REC	1	10/16/2012 2:49:37 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.037	0.033		mg/kg	1	10/23/2012 4:42:56 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	11/2/2012 7:30:09 AM
Arsenic	ND	13		mg/Kg	5	11/2/2012 7:30:09 AM
Barium	840	2.0		mg/Kg	20	11/2/2012 9:49:13 AM
Beryllium	0.94	0.75		mg/Kg	5	11/2/2012 7:30:09 AM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 7:30:09 AM
Chromium	23	1.5		mg/Kg	5	11/2/2012 7:30:09 AM
Cobalt	5.4	1.5		mg/Kg	5	11/2/2012 7:30:09 AM
Iron	19000	500		mg/Kg	500	11/2/2012 9:51:40 AM
Lead	3.4	1.3		mg/Kg	5	11/2/2012 7:30:09 AM
Manganese	680	2.0		mg/Kg	20	11/2/2012 9:49:13 AM
Nickel	8.5	2.5		mg/Kg	5	11/2/2012 7:30:09 AM
Selenium	ND	13		mg/Kg	5	11/2/2012 7:30:09 AM
Silver	ND	1.3		mg/Kg	5	11/2/2012 7:30:09 AM
Vanadium	32	13		mg/Kg	5	11/2/2012 7:30:09 AM
Zinc	28	13		mg/Kg	5	11/2/2012 7:30:09 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-002
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 7:38:49 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 7:38:49 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 7:38:49 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-002 **Matrix:** SOIL **Received Date:** 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 7:38:49 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Surr: 2,4,6-Tribromophenol	47.1	21.3-145		%REC	1	10/21/2012 7:38:49 AM
Surr: 2-Fluorobiphenyl	54.9	20-131		%REC	1	10/21/2012 7:38:49 AM
Surr: 2-Fluorophenol	42.7	11.9-130		%REC	1	10/21/2012 7:38:49 AM
Surr: 4-Terphenyl-d14	59.1	25.1-149		%REC	1	10/21/2012 7:38:49 AM
Surr: Nitrobenzene-d5	50.0	25.6-137		%REC	1	10/21/2012 7:38:49 AM
Surr: Phenol-d5	44.3	20.3-132		%REC	1	10/21/2012 7:38:49 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00188	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Toluene	0.00386	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Ethylbenzene	0.0622	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Xylenes, Total	0.379	0.00246	E	mg/Kg	1	10/15/2012 2:20:41 PM
Methyl tert-butyl ether (MTBE)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2,4-Trimethylbenzene	0.00184	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,3,5-Trimethylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dichloroethane (EDC)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dibromoethane (EDB)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Naphthalene	ND	0.00246		mg/Kg	1	10/15/2012 2:20:41 PM
1-Methylnaphthalene	ND	0.00491		mg/Kg	1	10/15/2012 2:20:41 PM
2-Methylnaphthalene	ND	0.00491		mg/Kg	1	10/15/2012 2:20:41 PM
Acetone	3.98	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
Bromobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Bromodichloromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Bromoform	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Bromomethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
2-Butanone	0.0314	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
Carbon tetrachloride	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Chlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Chloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Chloroform	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Chloromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
2-Chlorotoluene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-002
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
4-Chlorotoluene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
cis-1,2-DCE	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
cis-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dibromo-3-chloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Dibromochloromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Dibromomethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,3-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,4-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Dichlorodifluoromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1-Dichloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1-Dichloroethene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,3-Dichloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
2,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1-Dichloropropene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Hexachlorobutadiene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Isopropylbenzene	0.00282	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
4-Isopropyltoluene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Methylene chloride	ND	0.00368		mg/Kg	1	10/15/2012 2:20:41 PM
n-Butylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
2-Hexanone	ND	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
n-Propylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
sec-Butylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Styrene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
4-Methyl-2-pentanone	ND	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
tert-Butylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1,1,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1,2,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Tetrachloroethene (PCE)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
trans-1,2-DCE	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
trans-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2,3-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2,4-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1,1-Trichloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1,2-Trichloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Trichloroethene (TCE)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Trichlorofluoromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2,3-Trichloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Vinyl chloride	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	10/15/2012 2:20:41 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/11/2012 12:20:00 PM
Lab ID: 1210692-002
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	1	10/15/2012 2:20:41 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/15/2012 2:20:41 PM
Surr: Toluene-d8	91.2	70-130		%REC	1	10/15/2012 2:20:41 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 3:44:56 PM
Surr: BFB	95.6	70-130		%REC	1	10/21/2012 3:44:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:30:00 PM
Lab ID: 1210692-003
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/16/2012 9:09:09 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/16/2012 9:09:09 AM
Surr: DNOP	92.1	77.6-140		%REC	1	10/16/2012 9:09:09 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:44:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	11/2/2012 7:32:33 AM
Arsenic	ND	13		mg/Kg	5	11/2/2012 7:32:33 AM
Barium	1000	5.0		mg/Kg	50	11/2/2012 10:25:25 AM
Beryllium	ND	0.75		mg/Kg	5	11/2/2012 7:32:33 AM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 7:32:33 AM
Chromium	11	1.5		mg/Kg	5	11/2/2012 7:32:33 AM
Cobalt	4.7	1.5		mg/Kg	5	11/2/2012 7:32:33 AM
Iron	16000	500		mg/Kg	500	11/2/2012 9:56:46 AM
Lead	3.9	1.3		mg/Kg	5	11/2/2012 7:32:33 AM
Manganese	950	2.0		mg/Kg	20	11/2/2012 9:54:19 AM
Nickel	7.3	2.5		mg/Kg	5	11/2/2012 7:32:33 AM
Selenium	ND	13		mg/Kg	5	11/2/2012 7:32:33 AM
Silver	ND	1.3		mg/Kg	5	11/2/2012 7:32:33 AM
Vanadium	29	13		mg/Kg	5	11/2/2012 7:32:33 AM
Zinc	17	13		mg/Kg	5	11/2/2012 7:32:33 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:30:00 PM
Lab ID: 1210692-003
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 12:31:33 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 12:31:33 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 12:31:33 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:30:00 PM
Lab ID: 1210692-003
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 12:31:33 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Surr: 2,4,6-Tribromophenol	69.5	21.3-145		%REC	1	10/21/2012 12:31:33 AM
Surr: 2-Fluorobiphenyl	82.1	20-131		%REC	1	10/21/2012 12:31:33 AM
Surr: 2-Fluorophenol	60.1	11.9-130		%REC	1	10/21/2012 12:31:33 AM
Surr: 4-Terphenyl-d14	71.6	25.1-149		%REC	1	10/21/2012 12:31:33 AM
Surr: Nitrobenzene-d5	75.8	25.6-137		%REC	1	10/21/2012 12:31:33 AM
Surr: Phenol-d5	68.9	20.3-132		%REC	1	10/21/2012 12:31:33 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00151	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Toluene	0.00105	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Ethylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Xylenes, Total	ND	0.00180		mg/Kg	1	10/15/2012 2:51:33 PM
Methyl tert-butyl ether (MTBE)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2,4-Trimethylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,3,5-Trimethylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dichloroethane (EDC)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dibromoethane (EDB)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Naphthalene	ND	0.00180		mg/Kg	1	10/15/2012 2:51:33 PM
1-Methylnaphthalene	ND	0.00360		mg/Kg	1	10/15/2012 2:51:33 PM
2-Methylnaphthalene	ND	0.00360		mg/Kg	1	10/15/2012 2:51:33 PM
Acetone	0.119	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
Bromobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Bromodichloromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Bromoform	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Bromomethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
2-Butanone	ND	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
Carbon tetrachloride	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Chlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Chloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Chloroform	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Chloromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
2-Chlorotoluene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:30:00 PM
Lab ID: 1210692-003
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
4-Chlorotoluene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
cis-1,2-DCE	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
cis-1,3-Dichloropropene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dibromo-3-chloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Dibromochloromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Dibromomethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,3-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,4-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Dichlorodifluoromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1-Dichloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1-Dichloroethene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dichloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,3-Dichloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
2,2-Dichloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1-Dichloropropene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Hexachlorobutadiene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Isopropylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
4-Isopropyltoluene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Methylene chloride	ND	0.00270		mg/Kg	1	10/15/2012 2:51:33 PM
n-Butylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
2-Hexanone	ND	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
n-Propylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
sec-Butylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Styrene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
4-Methyl-2-pentanone	ND	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
tert-Butylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1,1,2-Tetrachloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1,2,2-Tetrachloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Tetrachloroethene (PCE)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
trans-1,2-DCE	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
trans-1,3-Dichloropropene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2,3-Trichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2,4-Trichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1,1-Trichloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1,2-Trichloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Trichloroethene (TCE)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Trichlorofluoromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2,3-Trichloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Vinyl chloride	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	1	10/15/2012 2:51:33 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:30:00 PM
Lab ID: 1210692-003
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	10/15/2012 2:51:33 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/15/2012 2:51:33 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/15/2012 2:51:33 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 4:13:44 PM
Surr: BFB	88.8	70-130		%REC	1	10/21/2012 4:13:44 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (4-6')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:45:00 PM
Lab ID: 1210692-004
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 10:45:38 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 10:45:38 AM
Surr: DNOP	91.9	77.6-140		%REC	1	10/16/2012 10:45:38 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:46:30 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
Barium	190	1.0		mg/Kg	10	11/2/2012 7:35:01 AM
Beryllium	0.97	0.30		mg/Kg	2	10/25/2012 9:36:54 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:36:54 PM
Chromium	10	0.60		mg/Kg	2	10/25/2012 9:36:54 PM
Cobalt	4.9	0.60		mg/Kg	2	10/25/2012 9:36:54 PM
Iron	17000	500		mg/Kg	500	11/2/2012 7:37:27 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 9:36:54 PM
Manganese	330	1.0		mg/Kg	10	11/2/2012 7:35:01 AM
Nickel	8.6	1.0		mg/Kg	2	10/25/2012 9:36:54 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 9:36:54 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
Zinc	16	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (4-6')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:45:00 PM
Lab ID: 1210692-004
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 1:00:43 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 1:00:43 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 1:00:43 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (4-6')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:45:00 PM
Lab ID: 1210692-004
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 1:00:43 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Surr: 2,4,6-Tribromophenol	77.8	21.3-145		%REC	1	10/21/2012 1:00:43 AM
Surr: 2-Fluorobiphenyl	83.8	20-131		%REC	1	10/21/2012 1:00:43 AM
Surr: 2-Fluorophenol	74.4	11.9-130		%REC	1	10/21/2012 1:00:43 AM
Surr: 4-Terphenyl-d14	74.4	25.1-149		%REC	1	10/21/2012 1:00:43 AM
Surr: Nitrobenzene-d5	90.8	25.6-137		%REC	1	10/21/2012 1:00:43 AM
Surr: Phenol-d5	85.2	20.3-132		%REC	1	10/21/2012 1:00:43 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00321	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Toluene	0.00205	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Ethylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Xylenes, Total	ND	0.00150		mg/Kg	1	10/15/2012 3:22:21 PM
Methyl tert-butyl ether (MTBE)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2,4-Trimethylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,3,5-Trimethylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dichloroethane (EDC)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dibromoethane (EDB)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Naphthalene	ND	0.00150		mg/Kg	1	10/15/2012 3:22:21 PM
1-Methylnaphthalene	ND	0.00299		mg/Kg	1	10/15/2012 3:22:21 PM
2-Methylnaphthalene	ND	0.00299		mg/Kg	1	10/15/2012 3:22:21 PM
Acetone	0.0242	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
Bromobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Bromodichloromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Bromoform	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Bromomethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
2-Butanone	ND	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
Carbon tetrachloride	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Chlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Chloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Chloroform	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Chloromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
2-Chlorotoluene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (4-6')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:45:00 PM
Lab ID: 1210692-004
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
4-Chlorotoluene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
cis-1,2-DCE	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
cis-1,3-Dichloropropene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dibromo-3-chloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Dibromochloromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Dibromomethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,3-Dichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,4-Dichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Dichlorodifluoromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1-Dichloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1-Dichloroethene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dichloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,3-Dichloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
2,2-Dichloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1-Dichloropropene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Hexachlorobutadiene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Isopropylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
4-Isopropyltoluene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Methylene chloride	ND	0.00224		mg/Kg	1	10/15/2012 3:22:21 PM
n-Butylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
2-Hexanone	ND	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
n-Propylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
sec-Butylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Styrene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
4-Methyl-2-pentanone	ND	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
tert-Butylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1,1,2-Tetrachloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1,2,2-Tetrachloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Tetrachloroethene (PCE)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
trans-1,2-DCE	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
trans-1,3-Dichloropropene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2,3-Trichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2,4-Trichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1,1-Trichloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1,2-Trichloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Trichloroethene (TCE)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Trichlorofluoromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2,3-Trichloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Vinyl chloride	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	10/15/2012 3:22:21 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (4-6')
Project: SWMU NO.1
Collection Date: 10/11/2012 12:45:00 PM
Lab ID: 1210692-004
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	88.1	70-130		%REC	1	10/15/2012 3:22:21 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/15/2012 3:22:21 PM
Surr: Toluene-d8	87.0	70-130		%REC	1	10/15/2012 3:22:21 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 4:42:26 PM
Surr: BFB	90.3	70-130		%REC	1	10/21/2012 4:42:26 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (10-12')
Project: SWMU NO.1
Collection Date: 10/11/2012 1:00:00 PM
Lab ID: 1210692-005
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 11:07:11 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 11:07:11 AM
Surr: DNOP	91.5	77.6-140		%REC	1	10/16/2012 11:07:11 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:48:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
Barium	1100	5.0		mg/Kg	50	11/2/2012 9:59:37 AM
Beryllium	1.0	0.30		mg/Kg	2	10/25/2012 9:45:32 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:45:32 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 9:45:32 PM
Cobalt	5.8	0.60		mg/Kg	2	10/25/2012 9:45:32 PM
Iron	18000	500		mg/Kg	500	11/2/2012 7:42:48 AM
Lead	1.5	0.50		mg/Kg	2	10/25/2012 9:45:32 PM
Manganese	540	2.0		mg/Kg	20	11/2/2012 7:40:21 AM
Nickel	12	1.0		mg/Kg	2	10/25/2012 9:45:32 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 9:45:32 PM
Vanadium	21	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
Zinc	24	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (10-12')
Project: SWMU NO.1
Collection Date: 10/11/2012 1:00:00 PM
Lab ID: 1210692-005
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 1:29:49 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 1:29:49 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 1:29:49 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (10-12')
Project: SWMU NO.1
Collection Date: 10/11/2012 1:00:00 PM
Lab ID: 1210692-005
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 1:29:49 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Surr: 2,4,6-Tribromophenol	57.4	21.3-145		%REC	1	10/21/2012 1:29:49 AM
Surr: 2-Fluorobiphenyl	64.7	20-131		%REC	1	10/21/2012 1:29:49 AM
Surr: 2-Fluorophenol	53.2	11.9-130		%REC	1	10/21/2012 1:29:49 AM
Surr: 4-Terphenyl-d14	59.7	25.1-149		%REC	1	10/21/2012 1:29:49 AM
Surr: Nitrobenzene-d5	63.1	25.6-137		%REC	1	10/21/2012 1:29:49 AM
Surr: Phenol-d5	61.3	20.3-132		%REC	1	10/21/2012 1:29:49 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00791	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Toluene	0.00372	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Ethylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Xylenes, Total	ND	0.00188		mg/Kg	1	10/15/2012 3:53:08 PM
Methyl tert-butyl ether (MTBE)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2,4-Trimethylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,3,5-Trimethylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dichloroethane (EDC)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dibromoethane (EDB)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Naphthalene	ND	0.00188		mg/Kg	1	10/15/2012 3:53:08 PM
1-Methylnaphthalene	ND	0.00376		mg/Kg	1	10/15/2012 3:53:08 PM
2-Methylnaphthalene	ND	0.00376		mg/Kg	1	10/15/2012 3:53:08 PM
Acetone	0.0217	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
Bromobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Bromodichloromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Bromoform	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Bromomethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
2-Butanone	ND	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
Carbon tetrachloride	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Chlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Chloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Chloroform	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Chloromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
2-Chlorotoluene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (10-12')
Project: SWMU NO.1
Collection Date: 10/11/2012 1:00:00 PM
Lab ID: 1210692-005
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
4-Chlorotoluene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
cis-1,2-DCE	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
cis-1,3-Dichloropropene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dibromo-3-chloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Dibromochloromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Dibromomethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,3-Dichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,4-Dichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Dichlorodifluoromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1-Dichloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1-Dichloroethene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dichloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,3-Dichloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
2,2-Dichloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1-Dichloropropene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Hexachlorobutadiene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Isopropylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
4-Isopropyltoluene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Methylene chloride	ND	0.00282		mg/Kg	1	10/15/2012 3:53:08 PM
n-Butylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
2-Hexanone	ND	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
n-Propylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
sec-Butylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Styrene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
4-Methyl-2-pentanone	ND	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
tert-Butylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1,1,2-Tetrachloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1,2,2-Tetrachloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Tetrachloroethene (PCE)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
trans-1,2-DCE	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
trans-1,3-Dichloropropene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2,3-Trichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2,4-Trichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1,1-Trichloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1,2-Trichloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Trichloroethene (TCE)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Trichlorofluoromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2,3-Trichloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Vinyl chloride	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	1	10/15/2012 3:53:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-20 (10-12')
Project: SWMU NO.1
Collection Date: 10/11/2012 1:00:00 PM
Lab ID: 1210692-005
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	109	70-130		%REC	1	10/15/2012 3:53:08 PM
Surr: Dibromofluoromethane	111	70-130		%REC	1	10/15/2012 3:53:08 PM
Surr: Toluene-d8	86.4	70-130		%REC	1	10/15/2012 3:53:08 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 5:10:49 PM
Surr: BFB	93.2	70-130		%REC	1	10/21/2012 5:10:49 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:20:00 PM
Lab ID: 1210692-006
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 4:11:59 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 4:11:59 PM
Surr: DNOP	97.6	77.6-140		%REC	1	10/16/2012 4:11:59 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.080	0.033		mg/kg	1	10/23/2012 4:50:01 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
Barium	360	2.0		mg/Kg	20	11/2/2012 7:45:41 AM
Beryllium	0.70	0.30		mg/Kg	2	10/25/2012 9:51:21 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:51:21 PM
Chromium	24	0.60		mg/Kg	2	10/25/2012 9:51:21 PM
Cobalt	3.9	0.60		mg/Kg	2	10/25/2012 9:51:21 PM
Iron	14000	500		mg/Kg	500	11/2/2012 7:58:27 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 9:51:21 PM
Manganese	480	2.0		mg/Kg	20	11/2/2012 7:45:41 AM
Nickel	7.7	1.0		mg/Kg	2	10/25/2012 9:51:21 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 9:51:21 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
Zinc	34	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzoic acid	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:20:00 PM
Lab ID: 1210692-006
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 10:32:27 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 10:32:27 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 10:32:27 AM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Isophorone	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2-Methylphenol	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
Nitrobenzene	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:20:00 PM
Lab ID: 1210692-006
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 10:32:27 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Pyridine	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Surr: 2,4,6-Tribromophenol	102	21.3-145		%REC	1	10/21/2012 10:32:27 AM
Surr: 2-Fluorobiphenyl	96.5	20-131		%REC	1	10/21/2012 10:32:27 AM
Surr: 2-Fluorophenol	90.4	11.9-130		%REC	1	10/21/2012 10:32:27 AM
Surr: 4-Terphenyl-d14	86.0	25.1-149		%REC	1	10/21/2012 10:32:27 AM
Surr: Nitrobenzene-d5	97.6	25.6-137		%REC	1	10/21/2012 10:32:27 AM
Surr: Phenol-d5	87.3	20.3-132		%REC	1	10/21/2012 10:32:27 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00204	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Toluene	0.00190	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Ethylbenzene	0.00165	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Xylenes, Total	0.00901	0.00169		mg/Kg	1	10/15/2012 4:23:53 PM
Methyl tert-butyl ether (MTBE)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2,4-Trimethylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,3,5-Trimethylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dichloroethane (EDC)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dibromoethane (EDB)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Naphthalene	ND	0.00169		mg/Kg	1	10/15/2012 4:23:53 PM
1-Methylnaphthalene	ND	0.00339		mg/Kg	1	10/15/2012 4:23:53 PM
2-Methylnaphthalene	ND	0.00339		mg/Kg	1	10/15/2012 4:23:53 PM
Acetone	0.156	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
Bromobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Bromodichloromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Bromoform	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Bromomethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
2-Butanone	ND	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
Carbon tetrachloride	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Chlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Chloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Chloroform	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Chloromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
2-Chlorotoluene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:20:00 PM
Lab ID: 1210692-006
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
4-Chlorotoluene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
cis-1,2-DCE	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
cis-1,3-Dichloropropene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dibromo-3-chloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Dibromochloromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Dibromomethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,3-Dichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,4-Dichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Dichlorodifluoromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1-Dichloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1-Dichloroethene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dichloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,3-Dichloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
2,2-Dichloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1-Dichloropropene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Hexachlorobutadiene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Isopropylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
4-Isopropyltoluene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Methylene chloride	ND	0.00254		mg/Kg	1	10/15/2012 4:23:53 PM
n-Butylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
2-Hexanone	ND	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
n-Propylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
sec-Butylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Styrene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
4-Methyl-2-pentanone	ND	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
tert-Butylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1,1,2-Tetrachloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1,2,2-Tetrachloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Tetrachloroethene (PCE)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
trans-1,2-DCE	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
trans-1,3-Dichloropropene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2,3-Trichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2,4-Trichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1,1-Trichloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1,2-Trichloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Trichloroethene (TCE)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Trichlorofluoromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2,3-Trichloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Vinyl chloride	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Surr: 1,2-Dichloroethane-d4	93.0	70-130		%REC	1	10/15/2012 4:23:53 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:20:00 PM
Lab ID: 1210692-006
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	127	70-130		%REC	1	10/15/2012 4:23:53 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/15/2012 4:23:53 PM
Surr: Toluene-d8	90.5	70-130		%REC	1	10/15/2012 4:23:53 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 5:39:04 PM
Surr: BFB	91.5	70-130		%REC	1	10/21/2012 5:39:04 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:30:00 PM
Lab ID: 1210692-007
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 3:15:01 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 3:15:01 PM
Surr: DNOP	95.9	77.6-140		%REC	1	10/16/2012 3:15:01 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:51:46 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
Barium	81	0.20		mg/Kg	2	10/25/2012 10:07:42 PM
Beryllium	0.84	0.30		mg/Kg	2	10/25/2012 10:07:42 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:07:42 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 10:07:42 PM
Cobalt	4.9	0.60		mg/Kg	2	10/25/2012 10:07:42 PM
Iron	20000	500		mg/Kg	500	11/2/2012 8:03:45 AM
Lead	3.2	0.50		mg/Kg	2	10/25/2012 10:07:42 PM
Manganese	600	2.0		mg/Kg	20	11/2/2012 8:01:20 AM
Nickel	8.5	1.0		mg/Kg	2	10/25/2012 10:07:42 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:07:42 PM
Vanadium	30	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
Zinc	18	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:30:00 PM
Lab ID: 1210692-007
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 8:36:22 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
Di-n-octyl phthalate	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 8:36:22 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 8:36:22 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
4-Nitroaniline	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Project: SWMU NO.1
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Lab ID: 1210692-007
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 8:36:22 AM
Pentachlorophenol	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Surr: 2,4,6-Tribromophenol	82.3	21.3-145		%REC	1	10/21/2012 8:36:22 AM
Surr: 2-Fluorobiphenyl	82.4	20-131		%REC	1	10/21/2012 8:36:22 AM
Surr: 2-Fluorophenol	74.9	11.9-130		%REC	1	10/21/2012 8:36:22 AM
Surr: 4-Terphenyl-d14	79.4	25.1-149		%REC	1	10/21/2012 8:36:22 AM
Surr: Nitrobenzene-d5	84.4	25.6-137		%REC	1	10/21/2012 8:36:22 AM
Surr: Phenol-d5	80.7	20.3-132		%REC	1	10/21/2012 8:36:22 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00122	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Toluene	0.00114	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Ethylbenzene	0.00135	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Xylenes, Total	0.00793	0.00158		mg/Kg	1	10/15/2012 4:54:48 PM
Methyl tert-butyl ether (MTBE)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2,4-Trimethylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,3,5-Trimethylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dichloroethane (EDC)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dibromoethane (EDB)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Naphthalene	ND	0.00158		mg/Kg	1	10/15/2012 4:54:48 PM
1-Methylnaphthalene	ND	0.00316		mg/Kg	1	10/15/2012 4:54:48 PM
2-Methylnaphthalene	ND	0.00316		mg/Kg	1	10/15/2012 4:54:48 PM
Acetone	0.158	0.00789	E	mg/Kg	1	10/15/2012 4:54:48 PM
Bromobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Bromodichloromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Bromoform	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Bromomethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
2-Butanone	0.0138	0.00789		mg/Kg	1	10/15/2012 4:54:48 PM
Carbon tetrachloride	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Chlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Chloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Chloroform	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Chloromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
2-Chlorotoluene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:30:00 PM
Lab ID: 1210692-007
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00789		mg/Kg	1	10/15/2012 4:54:48 PM
4-Chlorotoluene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
cis-1,2-DCE	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
cis-1,3-Dichloropropene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dibromo-3-chloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Dibromochloromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Dibromomethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,3-Dichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,4-Dichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Dichlorodifluoromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1-Dichloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1-Dichloroethene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dichloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,3-Dichloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
2,2-Dichloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1-Dichloropropene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Hexachlorobutadiene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Isopropylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
4-Isopropyltoluene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Methylene chloride	ND	0.00237		mg/Kg	1	10/15/2012 4:54:48 PM
n-Butylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
2-Hexanone	ND	0.00789		mg/Kg	1	10/15/2012 4:54:48 PM
n-Propylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
sec-Butylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Styrene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
4-Methyl-2-pentanone	ND	0.00789		mg/Kg	1	10/15/2012 4:54:48 PM
tert-Butylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1,1,2-Tetrachloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1,2,2-Tetrachloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Tetrachloroethene (PCE)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
trans-1,2-DCE	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
trans-1,3-Dichloropropene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2,3-Trichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2,4-Trichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1,1-Trichloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1,2-Trichloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Trichloroethene (TCE)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Trichlorofluoromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2,3-Trichloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Vinyl chloride	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%REC	1	10/15/2012 4:54:48 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:30:00 PM
Lab ID: 1210692-007
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	127	70-130		%REC	1	10/15/2012 4:54:48 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/15/2012 4:54:48 PM
Surr: Toluene-d8	98.6	70-130		%REC	1	10/15/2012 4:54:48 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 6:07:43 PM
Surr: BFB	93.4	70-130		%REC	1	10/21/2012 6:07:43 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (6-8')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:45:00 PM
Lab ID: 1210692-008
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 11:50:24 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 11:50:24 AM
Surr: DNOP	90.9	77.6-140		%REC	1	10/16/2012 11:50:24 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:57:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
Barium	540	2.0		mg/Kg	20	11/2/2012 8:06:38 AM
Beryllium	0.90	0.30		mg/Kg	2	10/25/2012 10:15:17 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:15:17 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 10:15:17 PM
Cobalt	5.2	0.60		mg/Kg	2	10/25/2012 10:15:17 PM
Iron	22000	500		mg/Kg	500	11/2/2012 8:09:03 AM
Lead	ND	0.50		mg/Kg	2	10/25/2012 10:15:17 PM
Manganese	570	2.0		mg/Kg	20	11/2/2012 8:06:38 AM
Nickel	11	1.0		mg/Kg	2	10/25/2012 10:15:17 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:15:17 PM
Vanadium	26	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
Zinc	22	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (6-8')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:45:00 PM
Lab ID: 1210692-008
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 1:58:57 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 1:58:57 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 1:58:57 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (6-8')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:45:00 PM
Lab ID: 1210692-008
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 1:58:57 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Surr: 2,4,6-Tribromophenol	70.4	21.3-145		%REC	1	10/21/2012 1:58:57 AM
Surr: 2-Fluorobiphenyl	82.7	20-131		%REC	1	10/21/2012 1:58:57 AM
Surr: 2-Fluorophenol	74.2	11.9-130		%REC	1	10/21/2012 1:58:57 AM
Surr: 4-Terphenyl-d14	70.8	25.1-149		%REC	1	10/21/2012 1:58:57 AM
Surr: Nitrobenzene-d5	89.8	25.6-137		%REC	1	10/21/2012 1:58:57 AM
Surr: Phenol-d5	76.7	20.3-132		%REC	1	10/21/2012 1:58:57 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.0114	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Toluene	0.00448	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Ethylbenzene	0.00107	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Xylenes, Total	0.00276	0.00160		mg/Kg	1	10/15/2012 5:25:42 PM
Methyl tert-butyl ether (MTBE)	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2,4-Trimethylbenzene	0.00123	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,3,5-Trimethylbenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dichloroethane (EDC)	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dibromoethane (EDB)	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Naphthalene	ND	0.00160		mg/Kg	1	10/15/2012 5:25:42 PM
1-Methylnaphthalene	ND	0.00320		mg/Kg	1	10/15/2012 5:25:42 PM
2-Methylnaphthalene	ND	0.00320		mg/Kg	1	10/15/2012 5:25:42 PM
Acetone	0.0250	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Bromobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Bromodichloromethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Bromoform	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Bromomethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
2-Butanone	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Carbon tetrachloride	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Chlorobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Chloroethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Chloroform	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Chloromethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
2-Chlorotoluene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (6-8')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:45:00 PM
Lab ID: 1210692-008
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
4-Chlorotoluene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
cis-1,2-DCE	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
cis-1,3-Dichloropropene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dibromo-3-chloropropane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Dibromochloromethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Dibromomethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dichlorobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,3-Dichlorobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,4-Dichlorobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Dichlorodifluoromethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1-Dichloroethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1-Dichloroethene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dichloropropane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,3-Dichloropropane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
2,2-Dichloropropane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1-Dichloropropene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Hexachlorobutadiene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Isopropylbenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
4-Isopropyltoluene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Methylene chloride	ND	0.00240		mg/Kg	1	10/15/2012 5:25:42 PM
n-Butylbenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
2-Hexanone	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
n-Propylbenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
sec-Butylbenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Styrene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
4-Methyl-2-pentanone	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
tert-Butylbenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1,1,2-Tetrachloroethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1,2,2-Tetrachloroethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Tetrachloroethene (PCE)	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
trans-1,2-DCE	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
trans-1,3-Dichloropropene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2,3-Trichlorobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2,4-Trichlorobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1,1-Trichloroethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1,2-Trichloroethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Trichloroethene (TCE)	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Trichlorofluoromethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2,3-Trichloropropane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Vinyl chloride	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	10/15/2012 5:25:42 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-38 (6-8')
Project: SWMU NO.1
Collection Date: 10/11/2012 2:45:00 PM
Lab ID: 1210692-008
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	10/15/2012 5:25:42 PM
Surr: Dibromofluoromethane	107	70-130		%REC	1	10/15/2012 5:25:42 PM
Surr: Toluene-d8	103	70-130		%REC	1	10/15/2012 5:25:42 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 6:36:19 PM
Surr: BFB	86.4	70-130		%REC	1	10/21/2012 6:36:19 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:00:00 AM
Lab ID: 1210692-009
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 4:37:23 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 4:37:23 PM
Surr: DNOP	83.3	77.6-140		%REC	1	10/16/2012 4:37:23 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.054	0.033		mg/kg	1	10/23/2012 4:58:51 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
Barium	560	2.0		mg/Kg	20	11/2/2012 8:11:40 AM
Beryllium	0.60	0.30		mg/Kg	2	10/25/2012 10:21:12 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:21:12 PM
Chromium	8.0	0.60		mg/Kg	2	10/25/2012 10:21:12 PM
Cobalt	2.9	0.60		mg/Kg	2	10/25/2012 10:21:12 PM
Iron	11000	500		mg/Kg	500	11/2/2012 8:14:06 AM
Lead	1.4	0.50		mg/Kg	2	10/25/2012 10:21:12 PM
Manganese	470	2.0		mg/Kg	20	11/2/2012 8:11:40 AM
Nickel	5.8	1.0		mg/Kg	2	10/25/2012 10:21:12 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:21:12 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
Zinc	15	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:00:00 AM
Lab ID: 1210692-009
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 9:05:15 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 9:05:15 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 9:05:15 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.1
Lab ID: 1210692-009 **Matrix:** SOIL

Client Sample ID: SWMU 1-27 (0-0.5')
Collection Date: 10/12/2012 9:00:00 AM
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 9:05:15 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Surr: 2,4,6-Tribromophenol	78.1	21.3-145		%REC	1	10/21/2012 9:05:15 AM
Surr: 2-Fluorobiphenyl	91.7	20-131		%REC	1	10/21/2012 9:05:15 AM
Surr: 2-Fluorophenol	72.8	11.9-130		%REC	1	10/21/2012 9:05:15 AM
Surr: 4-Terphenyl-d14	84.8	25.1-149		%REC	1	10/21/2012 9:05:15 AM
Surr: Nitrobenzene-d5	89.6	25.6-137		%REC	1	10/21/2012 9:05:15 AM
Surr: Phenol-d5	78.1	20.3-132		%REC	1	10/21/2012 9:05:15 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00213	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Toluene	0.0114	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Ethylbenzene	0.0636	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Xylenes, Total	0.447	0.00187	E	mg/Kg	1	10/15/2012 11:04:19 PM
Methyl tert-butyl ether (MTBE)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2,4-Trimethylbenzene	0.00844	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,3,5-Trimethylbenzene	0.00334	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dichloroethane (EDC)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dibromoethane (EDB)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Naphthalene	ND	0.00187		mg/Kg	1	10/15/2012 11:04:19 PM
1-Methylnaphthalene	ND	0.00375		mg/Kg	1	10/15/2012 11:04:19 PM
2-Methylnaphthalene	ND	0.00375		mg/Kg	1	10/15/2012 11:04:19 PM
Acetone	2.44	0.00937	E	mg/Kg	1	10/15/2012 11:04:19 PM
Bromobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Bromodichloromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Bromoform	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Bromomethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
2-Butanone	0.0722	0.00937		mg/Kg	1	10/15/2012 11:04:19 PM
Carbon tetrachloride	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Chlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Chloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Chloroform	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Chloromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
2-Chlorotoluene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:00:00 AM
Lab ID: 1210692-009
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00937		mg/Kg	1	10/15/2012 11:04:19 PM
4-Chlorotoluene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
cis-1,2-DCE	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
cis-1,3-Dichloropropene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dibromo-3-chloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Dibromochloromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Dibromomethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,3-Dichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,4-Dichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Dichlorodifluoromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1-Dichloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1-Dichloroethene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dichloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,3-Dichloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
2,2-Dichloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1-Dichloropropene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Hexachlorobutadiene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Isopropylbenzene	0.00310	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
4-Isopropyltoluene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Methylene chloride	ND	0.00281		mg/Kg	1	10/15/2012 11:04:19 PM
n-Butylbenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
2-Hexanone	ND	0.00937		mg/Kg	1	10/15/2012 11:04:19 PM
n-Propylbenzene	0.00173	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
sec-Butylbenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Styrene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
4-Methyl-2-pentanone	ND	0.00937		mg/Kg	1	10/15/2012 11:04:19 PM
tert-Butylbenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1,1,2-Tetrachloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1,2,2-Tetrachloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Tetrachloroethene (PCE)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
trans-1,2-DCE	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
trans-1,3-Dichloropropene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2,3-Trichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2,4-Trichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1,1-Trichloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1,2-Trichloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Trichloroethene (TCE)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Trichlorofluoromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2,3-Trichloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Vinyl chloride	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Surr: 1,2-Dichloroethane-d4	88.0	70-130		%REC	1	10/15/2012 11:04:19 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:00:00 AM
Lab ID: 1210692-009
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	109	70-130		%REC	1	10/15/2012 11:04:19 PM
Surr: Dibromofluoromethane	97.0	70-130		%REC	1	10/15/2012 11:04:19 PM
Surr: Toluene-d8	91.0	70-130		%REC	1	10/15/2012 11:04:19 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	9.3	5.0		mg/Kg	1	10/21/2012 7:04:38 PM
Surr: BFB	94.8	70-130		%REC	1	10/21/2012 7:04:38 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:15:00 AM
Lab ID: 1210692-010
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 12:12:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 12:12:00 PM
Surr: DNOP	97.4	77.6-140		%REC	1	10/16/2012 12:12:00 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:00:37 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	11/2/2012 8:17:00 AM
Arsenic	ND	13		mg/Kg	5	11/2/2012 8:17:00 AM
Barium	750	5.0		mg/Kg	50	11/2/2012 10:02:03 AM
Beryllium	ND	0.75		mg/Kg	5	11/2/2012 8:17:00 AM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 8:17:00 AM
Chromium	8.0	1.5		mg/Kg	5	11/2/2012 8:17:00 AM
Cobalt	4.3	1.5		mg/Kg	5	11/2/2012 8:17:00 AM
Iron	11000	500		mg/Kg	500	11/2/2012 10:06:05 AM
Lead	2.7	1.3		mg/Kg	5	11/2/2012 8:17:00 AM
Manganese	1300	5.0		mg/Kg	50	11/2/2012 10:02:03 AM
Nickel	6.0	2.5		mg/Kg	5	11/2/2012 8:17:00 AM
Selenium	ND	13		mg/Kg	5	11/2/2012 8:17:00 AM
Silver	ND	1.3		mg/Kg	5	11/2/2012 8:17:00 AM
Vanadium	20	13		mg/Kg	5	11/2/2012 8:17:00 AM
Zinc	13	13		mg/Kg	5	11/2/2012 8:17:00 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:15:00 AM
Lab ID: 1210692-010
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 12:59:09 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 12:59:09 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 12:59:09 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:15:00 AM
Lab ID: 1210692-010
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 12:59:09 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Surr: 2,4,6-Tribromophenol	93.4	21.3-145		%REC	1	10/21/2012 12:59:09 PM
Surr: 2-Fluorobiphenyl	86.2	20-131		%REC	1	10/21/2012 12:59:09 PM
Surr: 2-Fluorophenol	92.9	11.9-130		%REC	1	10/21/2012 12:59:09 PM
Surr: 4-Terphenyl-d14	73.6	25.1-149		%REC	1	10/21/2012 12:59:09 PM
Surr: Nitrobenzene-d5	91.3	25.6-137		%REC	1	10/21/2012 12:59:09 PM
Surr: Phenol-d5	90.3	20.3-132		%REC	1	10/21/2012 12:59:09 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00130	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Toluene	0.00240	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Ethylbenzene	0.00135	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Xylenes, Total	0.00781	0.00150		mg/Kg	1	10/15/2012 5:56:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2,4-Trimethylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,3,5-Trimethylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dichloroethane (EDC)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dibromoethane (EDB)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Naphthalene	ND	0.00150		mg/Kg	1	10/15/2012 5:56:34 PM
1-Methylnaphthalene	ND	0.00301		mg/Kg	1	10/15/2012 5:56:34 PM
2-Methylnaphthalene	ND	0.00301		mg/Kg	1	10/15/2012 5:56:34 PM
Acetone	0.169	0.00752	E	mg/Kg	1	10/15/2012 5:56:34 PM
Bromobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Bromodichloromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Bromoform	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Bromomethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
2-Butanone	ND	0.00752		mg/Kg	1	10/15/2012 5:56:34 PM
Carbon tetrachloride	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Chlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Chloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Chloroform	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Chloromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
2-Chlorotoluene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:15:00 AM
Lab ID: 1210692-010
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00752		mg/Kg	1	10/15/2012 5:56:34 PM
4-Chlorotoluene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
cis-1,2-DCE	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
cis-1,3-Dichloropropene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dibromo-3-chloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Dibromochloromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Dibromomethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,3-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,4-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Dichlorodifluoromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1-Dichloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1-Dichloroethene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dichloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,3-Dichloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
2,2-Dichloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1-Dichloropropene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Hexachlorobutadiene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Isopropylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
4-Isopropyltoluene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Methylene chloride	ND	0.00226		mg/Kg	1	10/15/2012 5:56:34 PM
n-Butylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
2-Hexanone	ND	0.00752		mg/Kg	1	10/15/2012 5:56:34 PM
n-Propylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
sec-Butylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Styrene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
4-Methyl-2-pentanone	ND	0.00752		mg/Kg	1	10/15/2012 5:56:34 PM
tert-Butylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1,1,2-Tetrachloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1,2,2-Tetrachloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Tetrachloroethene (PCE)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
trans-1,2-DCE	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
trans-1,3-Dichloropropene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2,3-Trichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2,4-Trichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1,1-Trichloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1,2-Trichloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Trichloroethene (TCE)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Trichlorofluoromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2,3-Trichloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Vinyl chloride	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%REC	1	10/15/2012 5:56:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-27 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:15:00 AM
Lab ID: 1210692-010
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	1	10/15/2012 5:56:34 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/15/2012 5:56:34 PM
Surr: Toluene-d8	99.8	70-130		%REC	1	10/15/2012 5:56:34 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 7:32:58 PM
Surr: BFB	89.0	70-130		%REC	1	10/21/2012 7:32:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:50:00 AM
Lab ID: 1210692-011
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	27	10		mg/Kg	1	10/17/2012 11:25:46 AM
Motor Oil Range Organics (MRO)	53	51		mg/Kg	1	10/17/2012 11:25:46 AM
Surr: DNOP	92.3	77.6-140		%REC	1	10/17/2012 11:25:46 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.67	0.16		mg/kg	5	10/23/2012 7:09:55 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
Barium	490	2.0		mg/Kg	20	11/2/2012 8:19:27 AM
Beryllium	0.70	0.30		mg/Kg	2	10/25/2012 10:32:52 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:32:52 PM
Chromium	10	0.60		mg/Kg	2	10/25/2012 10:32:52 PM
Cobalt	3.7	0.60		mg/Kg	2	10/25/2012 10:32:52 PM
Iron	13000	500		mg/Kg	500	11/2/2012 8:24:30 AM
Lead	2.6	0.50		mg/Kg	2	10/25/2012 10:32:52 PM
Manganese	520	2.0		mg/Kg	20	11/2/2012 8:19:27 AM
Nickel	7.1	1.0		mg/Kg	2	10/25/2012 10:32:52 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:32:52 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
Zinc	19	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:50:00 AM
Lab ID: 1210692-011
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 2:27:36 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 2:27:36 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 2:27:36 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:50:00 AM
Lab ID: 1210692-011
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 2:27:36 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Surr: 2,4,6-Tribromophenol	92.9	21.3-145		%REC	1	10/21/2012 2:27:36 PM
Surr: 2-Fluorobiphenyl	96.6	20-131		%REC	1	10/21/2012 2:27:36 PM
Surr: 2-Fluorophenol	84.7	11.9-130		%REC	1	10/21/2012 2:27:36 PM
Surr: 4-Terphenyl-d14	90.5	25.1-149		%REC	1	10/21/2012 2:27:36 PM
Surr: Nitrobenzene-d5	100	25.6-137		%REC	1	10/21/2012 2:27:36 PM
Surr: Phenol-d5	91.8	20.3-132		%REC	1	10/21/2012 2:27:36 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00299	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Toluene	0.00473	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Ethylbenzene	0.00180	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Xylenes, Total	0.00910	0.00202		mg/Kg	1	10/15/2012 6:27:22 PM
Methyl tert-butyl ether (MTBE)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2,4-Trimethylbenzene	0.00209	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,3,5-Trimethylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dichloroethane (EDC)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dibromoethane (EDB)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Naphthalene	ND	0.00202		mg/Kg	1	10/15/2012 6:27:22 PM
1-Methylnaphthalene	ND	0.00405		mg/Kg	1	10/15/2012 6:27:22 PM
2-Methylnaphthalene	ND	0.00405		mg/Kg	1	10/15/2012 6:27:22 PM
Acetone	0.135	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
Bromobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Bromodichloromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Bromoform	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Bromomethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
2-Butanone	0.0161	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
Carbon tetrachloride	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Chlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Chloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Chloroform	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Chloromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
2-Chlorotoluene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:50:00 AM
Lab ID: 1210692-011
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
4-Chlorotoluene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
cis-1,2-DCE	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dibromo-3-chloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Dibromochloromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Dibromomethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,3-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,4-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Dichlorodifluoromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1-Dichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1-Dichloroethene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,3-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
2,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Hexachlorobutadiene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Isopropylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
4-Isopropyltoluene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Methylene chloride	ND	0.00303		mg/Kg	1	10/15/2012 6:27:22 PM
n-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
2-Hexanone	ND	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
n-Propylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
sec-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Styrene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
4-Methyl-2-pentanone	ND	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
tert-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1,1,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Tetrachloroethene (PCE)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
trans-1,2-DCE	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2,3-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2,4-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1,1-Trichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1,2-Trichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Trichloroethene (TCE)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Trichlorofluoromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2,3-Trichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Vinyl chloride	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%REC	1	10/15/2012 6:27:22 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 9:50:00 AM
Lab ID: 1210692-011
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	10/15/2012 6:27:22 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/15/2012 6:27:22 PM
Surr: Toluene-d8	99.5	70-130		%REC	1	10/15/2012 6:27:22 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 8:01:27 PM
Surr: BFB	90.4	70-130		%REC	1	10/21/2012 8:01:27 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 10:10:00 AM
Lab ID: 1210692-012
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 12:33:45 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 12:33:45 PM
Surr: DNOP	92.8	77.6-140		%REC	1	10/16/2012 12:33:45 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:04:21 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
Barium	570	2.0		mg/Kg	20	11/2/2012 8:36:09 AM
Beryllium	0.41	0.30		mg/Kg	2	10/25/2012 10:48:56 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:48:56 PM
Chromium	5.2	0.60		mg/Kg	2	10/25/2012 10:48:56 PM
Cobalt	2.7	0.60		mg/Kg	2	10/25/2012 10:48:56 PM
Iron	8800	500		mg/Kg	500	11/2/2012 8:38:33 AM
Lead	1.4	0.50		mg/Kg	2	10/25/2012 10:48:56 PM
Manganese	430	2.0		mg/Kg	20	11/2/2012 8:36:09 AM
Nickel	3.7	1.0		mg/Kg	2	10/25/2012 10:48:56 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:48:56 PM
Vanadium	12	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
Zinc	8.8	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM

Qualifiers:

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

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CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 10:10:00 AM
Lab ID: 1210692-012
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 2:57:01 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 2:57:01 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 2:57:01 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 2:57:01 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Surr: 2,4,6-Tribromophenol	90.2	21.3-145		%REC	1	10/21/2012 2:57:01 AM
Surr: 2-Fluorobiphenyl	87.9	20-131		%REC	1	10/21/2012 2:57:01 AM
Surr: 2-Fluorophenol	86.7	11.9-130		%REC	1	10/21/2012 2:57:01 AM
Surr: 4-Terphenyl-d14	85.4	25.1-149		%REC	1	10/21/2012 2:57:01 AM
Surr: Nitrobenzene-d5	93.5	25.6-137		%REC	1	10/21/2012 2:57:01 AM
Surr: Phenol-d5	90.6	20.3-132		%REC	1	10/21/2012 2:57:01 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	2.53	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Toluene	3.54	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Ethylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Xylenes, Total	2.38	2.03		mg/Kg	1	10/15/2012 6:58:08 PM
Methyl tert-butyl ether (MTBE)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2,4-Trimethylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,3,5-Trimethylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dichloroethane (EDC)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dibromoethane (EDB)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Naphthalene	ND	2.03		mg/Kg	1	10/15/2012 6:58:08 PM
1-Methylnaphthalene	ND	4.05		mg/Kg	1	10/15/2012 6:58:08 PM
2-Methylnaphthalene	ND	4.05		mg/Kg	1	10/15/2012 6:58:08 PM
Acetone	54.1	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
Bromobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Bromodichloromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Bromoform	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Bromomethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
2-Butanone	ND	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
Carbon tetrachloride	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Chlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Chloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Chloroform	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Chloromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
2-Chlorotoluene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
4-Chlorotoluene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
cis-1,2-DCE	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
cis-1,3-Dichloropropene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dibromo-3-chloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Dibromochloromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Dibromomethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,3-Dichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,4-Dichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Dichlorodifluoromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1-Dichloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1-Dichloroethene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dichloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,3-Dichloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
2,2-Dichloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1-Dichloropropene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Hexachlorobutadiene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Isopropylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
4-Isopropyltoluene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Methylene chloride	ND	3.04		mg/Kg	1	10/15/2012 6:58:08 PM
n-Butylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
2-Hexanone	ND	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
n-Propylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
sec-Butylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Styrene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
4-Methyl-2-pentanone	ND	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
tert-Butylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1,1,2-Tetrachloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1,2,2-Tetrachloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Tetrachloroethene (PCE)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
trans-1,2-DCE	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
trans-1,3-Dichloropropene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2,3-Trichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2,4-Trichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1,1-Trichloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1,2-Trichloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Trichloroethene (TCE)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Trichlorofluoromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2,3-Trichloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Vinyl chloride	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Surr: 1,2-Dichloroethane-d4	87.7	70-130		%REC	1	10/15/2012 6:58:08 PM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/15/2012 6:58:08 PM
Surr: Dibromofluoromethane	96.7	70-130		%REC	1	10/15/2012 6:58:08 PM
Surr: Toluene-d8	99.2	70-130		%REC	1	10/15/2012 6:58:08 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 8:29:46 PM
Surr: BFB	94.2	70-130		%REC	1	10/21/2012 8:29:46 PM

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Project: SWMU NO.1
Collection Date: 10/12/2012 10:10:00 AM
Lab ID: 1210692-013
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Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/16/2012 12:55:28 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 12:55:28 PM
Surr: DNOP	95.2	77.6-140		%REC	1	10/16/2012 12:55:28 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:06:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	12		mg/Kg	5	11/2/2012 8:41:27 AM
Arsenic	ND	12		mg/Kg	5	11/2/2012 8:41:27 AM
Barium	630	2.0		mg/Kg	20	11/2/2012 10:08:56 AM
Beryllium	ND	0.75		mg/Kg	5	11/2/2012 8:41:27 AM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 8:41:27 AM
Chromium	6.0	1.5		mg/Kg	5	11/2/2012 8:41:27 AM
Cobalt	4.1	1.5		mg/Kg	5	11/2/2012 8:41:27 AM
Iron	10000	500		mg/Kg	500	11/2/2012 10:11:20 AM
Lead	3.1	1.2		mg/Kg	5	11/2/2012 8:41:27 AM
Manganese	680	2.0		mg/Kg	20	11/2/2012 10:08:56 AM
Nickel	4.8	2.5		mg/Kg	5	11/2/2012 8:41:27 AM
Selenium	ND	12		mg/Kg	5	11/2/2012 8:41:27 AM
Silver	ND	1.2		mg/Kg	5	11/2/2012 8:41:27 AM
Vanadium	22	12		mg/Kg	5	11/2/2012 8:41:27 AM
Zinc	ND	12		mg/Kg	5	11/2/2012 8:41:27 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (1.5-2') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 10:10:00 AM
Lab ID: 1210692-013
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 3:25:59 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 3:25:59 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 3:25:59 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (1.5-2') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 10:10:00 AM
Lab ID: 1210692-013
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 3:25:59 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Surr: 2,4,6-Tribromophenol	90.5	21.3-145		%REC	1	10/21/2012 3:25:59 AM
Surr: 2-Fluorobiphenyl	89.6	20-131		%REC	1	10/21/2012 3:25:59 AM
Surr: 2-Fluorophenol	84.6	11.9-130		%REC	1	10/21/2012 3:25:59 AM
Surr: 4-Terphenyl-d14	80.7	25.1-149		%REC	1	10/21/2012 3:25:59 AM
Surr: Nitrobenzene-d5	92.6	25.6-137		%REC	1	10/21/2012 3:25:59 AM
Surr: Phenol-d5	86.9	20.3-132		%REC	1	10/21/2012 3:25:59 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	2.48	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Toluene	2.86	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Ethylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Xylenes, Total	1.64	1.57		mg/Kg	1	10/15/2012 7:28:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2,4-Trimethylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,3,5-Trimethylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dichloroethane (EDC)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dibromoethane (EDB)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Naphthalene	ND	1.57		mg/Kg	1	10/15/2012 7:28:52 PM
1-Methylnaphthalene	ND	3.15		mg/Kg	1	10/15/2012 7:28:52 PM
2-Methylnaphthalene	ND	3.15		mg/Kg	1	10/15/2012 7:28:52 PM
Acetone	34.8	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
Bromobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Bromodichloromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Bromoform	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Bromomethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
2-Butanone	ND	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
Carbon tetrachloride	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Chlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Chloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Chloroform	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Chloromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
2-Chlorotoluene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (1.5-2') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 10:10:00 AM
Lab ID: 1210692-013
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
4-Chlorotoluene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
cis-1,2-DCE	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
cis-1,3-Dichloropropene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dibromo-3-chloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Dibromochloromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Dibromomethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,3-Dichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,4-Dichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Dichlorodifluoromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1-Dichloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1-Dichloroethene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dichloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,3-Dichloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
2,2-Dichloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1-Dichloropropene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Hexachlorobutadiene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Isopropylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
4-Isopropyltoluene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Methylene chloride	ND	2.36		mg/Kg	1	10/15/2012 7:28:52 PM
n-Butylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
2-Hexanone	ND	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
n-Propylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
sec-Butylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Styrene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
4-Methyl-2-pentanone	ND	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
tert-Butylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1,1,2-Tetrachloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1,2,2-Tetrachloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Tetrachloroethene (PCE)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
trans-1,2-DCE	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
trans-1,3-Dichloropropene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2,3-Trichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2,4-Trichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1,1-Trichloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1,2-Trichloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Trichloroethene (TCE)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Trichlorofluoromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2,3-Trichloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Vinyl chloride	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	1	10/15/2012 7:28:52 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-28 (1.5-2') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 10:10:00 AM
Lab ID: 1210692-013
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	10/15/2012 7:28:52 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/15/2012 7:28:52 PM
Surr: Toluene-d8	96.5	70-130		%REC	1	10/15/2012 7:28:52 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 8:58:09 PM
Surr: BFB	93.8	70-130		%REC	1	10/21/2012 8:58:09 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 11:40:00 AM
Lab ID: 1210692-014
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	17	10		mg/Kg	1	10/17/2012 11:47:30 AM
Motor Oil Range Organics (MRO)	79	51		mg/Kg	1	10/17/2012 11:47:30 AM
Surr: DNOP	90.9	77.6-140		%REC	1	10/17/2012 11:47:30 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.13	0.033		mg/kg	1	10/23/2012 5:07:58 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
Barium	580	2.0		mg/Kg	20	11/2/2012 8:51:14 AM
Beryllium	0.69	0.30		mg/Kg	2	10/25/2012 11:16:17 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:16:17 PM
Chromium	13	0.60		mg/Kg	2	10/25/2012 11:16:17 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 11:16:17 PM
Iron	14000	500		mg/Kg	500	11/2/2012 8:53:39 AM
Lead	3.7	0.50		mg/Kg	2	10/25/2012 11:16:17 PM
Manganese	550	2.0		mg/Kg	20	11/2/2012 8:51:14 AM
Nickel	7.3	1.0		mg/Kg	2	10/25/2012 11:16:17 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:16:17 PM
Vanadium	21	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
Zinc	26	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 11:40:00 AM
Lab ID: 1210692-014
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 2:56:55 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 2:56:55 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 2:56:55 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 11:40:00 AM
Lab ID: 1210692-014
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 2:56:55 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Surr: 2,4,6-Tribromophenol	56.8	21.3-145		%REC	1	10/21/2012 2:56:55 PM
Surr: 2-Fluorobiphenyl	56.8	20-131		%REC	1	10/21/2012 2:56:55 PM
Surr: 2-Fluorophenol	51.4	11.9-130		%REC	1	10/21/2012 2:56:55 PM
Surr: 4-Terphenyl-d14	60.0	25.1-149		%REC	1	10/21/2012 2:56:55 PM
Surr: Nitrobenzene-d5	63.8	25.6-137		%REC	1	10/21/2012 2:56:55 PM
Surr: Phenol-d5	57.3	20.3-132		%REC	1	10/21/2012 2:56:55 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00240	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Toluene	0.00603	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Ethylbenzene	0.00644	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Xylenes, Total	0.0493	0.00202		mg/Kg	1	10/15/2012 7:59:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2,4-Trimethylbenzene	0.00268	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,3,5-Trimethylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dichloroethane (EDC)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dibromoethane (EDB)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Naphthalene	ND	0.00202		mg/Kg	1	10/15/2012 7:59:34 PM
1-Methylnaphthalene	ND	0.00404		mg/Kg	1	10/15/2012 7:59:34 PM
2-Methylnaphthalene	ND	0.00404		mg/Kg	1	10/15/2012 7:59:34 PM
Acetone	0.692	0.0101	E	mg/Kg	1	10/15/2012 7:59:34 PM
Bromobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Bromodichloromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Bromoform	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Bromomethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
2-Butanone	0.0213	0.0101		mg/Kg	1	10/15/2012 7:59:34 PM
Carbon tetrachloride	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Chlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Chloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Chloroform	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Chloromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
2-Chlorotoluene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 11:40:00 AM
Lab ID: 1210692-014
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.0101		mg/Kg	1	10/15/2012 7:59:34 PM
4-Chlorotoluene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
cis-1,2-DCE	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dibromo-3-chloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Dibromochloromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Dibromomethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,3-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,4-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Dichlorodifluoromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1-Dichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1-Dichloroethene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,3-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
2,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Hexachlorobutadiene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Isopropylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
4-Isopropyltoluene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Methylene chloride	ND	0.00303		mg/Kg	1	10/15/2012 7:59:34 PM
n-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
2-Hexanone	ND	0.0101		mg/Kg	1	10/15/2012 7:59:34 PM
n-Propylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
sec-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Styrene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
4-Methyl-2-pentanone	ND	0.0101		mg/Kg	1	10/15/2012 7:59:34 PM
tert-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1,1,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Tetrachloroethene (PCE)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
trans-1,2-DCE	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2,3-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2,4-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1,1-Trichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1,2-Trichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Trichloroethene (TCE)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Trichlorofluoromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2,3-Trichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Vinyl chloride	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%REC	1	10/15/2012 7:59:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 11:40:00 AM
Lab ID: 1210692-014
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	10/15/2012 7:59:34 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/15/2012 7:59:34 PM
Surr: Toluene-d8	91.1	70-130		%REC	1	10/15/2012 7:59:34 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 11:19:31 PM
Surr: BFB	97.4	70-130		%REC	1	10/21/2012 11:19:31 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:00:00 PM
Lab ID: 1210692-015
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	23	9.9		mg/Kg	1	10/17/2012 11:03:58 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/17/2012 11:03:58 AM
Surr: DNOP	94.2	77.6-140		%REC	1	10/17/2012 11:03:58 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.14	0.033		mg/kg	1	10/23/2012 5:09:46 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
Barium	610	2.0		mg/Kg	20	11/2/2012 8:58:09 AM
Beryllium	0.67	0.30		mg/Kg	2	10/25/2012 11:32:24 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:32:24 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 11:32:24 PM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 11:32:24 PM
Iron	14000	500		mg/Kg	500	11/2/2012 9:00:35 AM
Lead	3.1	0.50		mg/Kg	2	10/25/2012 11:32:24 PM
Manganese	530	2.0		mg/Kg	20	11/2/2012 8:58:09 AM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 11:32:24 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:32:24 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
Zinc	19	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Acenaphthylene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Aniline	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Anthracene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Azobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:00:00 PM
Lab ID: 1210692-015
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/21/2012 3:26:18 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Chrysene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Dibenzofuran	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/21/2012 3:26:18 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/21/2012 3:26:18 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
Fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Fluorene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Hexachloroethane	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Isophorone	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Naphthalene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
3-Nitroaniline	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:00:00 PM
Lab ID: 1210692-015
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/21/2012 3:26:18 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
Phenanthrene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Phenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Pyrene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Pyridine	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Surr: 2,4,6-Tribromophenol	94.8	21.3-145		%REC	1	10/21/2012 3:26:18 PM
Surr: 2-Fluorobiphenyl	96.7	20-131		%REC	1	10/21/2012 3:26:18 PM
Surr: 2-Fluorophenol	82.5	11.9-130		%REC	1	10/21/2012 3:26:18 PM
Surr: 4-Terphenyl-d14	102	25.1-149		%REC	1	10/21/2012 3:26:18 PM
Surr: Nitrobenzene-d5	92.1	25.6-137		%REC	1	10/21/2012 3:26:18 PM
Surr: Phenol-d5	92.2	20.3-132		%REC	1	10/21/2012 3:26:18 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00140	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Toluene	0.00263	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Ethylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Xylenes, Total	0.00149	0.00140		mg/Kg	1	10/15/2012 8:30:17 PM
Methyl tert-butyl ether (MTBE)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2,4-Trimethylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,3,5-Trimethylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dichloroethane (EDC)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dibromoethane (EDB)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Naphthalene	ND	0.00140		mg/Kg	1	10/15/2012 8:30:17 PM
1-Methylnaphthalene	ND	0.00279		mg/Kg	1	10/15/2012 8:30:17 PM
2-Methylnaphthalene	ND	0.00279		mg/Kg	1	10/15/2012 8:30:17 PM
Acetone	0.0541	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
Bromobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Bromodichloromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Bromoform	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Bromomethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
2-Butanone	ND	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
Carbon tetrachloride	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Chlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Chloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Chloroform	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Chloromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
2-Chlorotoluene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:00:00 PM
Lab ID: 1210692-015
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
4-Chlorotoluene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
cis-1,2-DCE	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
cis-1,3-Dichloropropene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dibromo-3-chloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Dibromochloromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Dibromomethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,3-Dichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,4-Dichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Dichlorodifluoromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1-Dichloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1-Dichloroethene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dichloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,3-Dichloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
2,2-Dichloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1-Dichloropropene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Hexachlorobutadiene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Isopropylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
4-Isopropyltoluene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Methylene chloride	ND	0.00209		mg/Kg	1	10/15/2012 8:30:17 PM
n-Butylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
2-Hexanone	ND	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
n-Propylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
sec-Butylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Styrene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
4-Methyl-2-pentanone	ND	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
tert-Butylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1,1,2-Tetrachloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1,2,2-Tetrachloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Tetrachloroethene (PCE)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
trans-1,2-DCE	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
trans-1,3-Dichloropropene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2,3-Trichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2,4-Trichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1,1-Trichloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1,2-Trichloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Trichloroethene (TCE)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Trichlorofluoromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2,3-Trichloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Vinyl chloride	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	1	10/15/2012 8:30:17 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:00:00 PM
Lab ID: 1210692-015
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	1	10/15/2012 8:30:17 PM
Surr: Dibromofluoromethane	99.4	70-130		%REC	1	10/15/2012 8:30:17 PM
Surr: Toluene-d8	106	70-130		%REC	1	10/15/2012 8:30:17 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 11:47:58 PM
Surr: BFB	87.9	70-130		%REC	1	10/21/2012 11:47:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:10:00 PM
Lab ID: 1210692-016
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/16/2012 6:43:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/16/2012 6:43:28 PM
Surr: DNOP	102	77.6-140		%REC	1	10/16/2012 6:43:28 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:11:32 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
Barium	870	2.0		mg/Kg	20	11/2/2012 9:12:14 AM
Beryllium	0.47	0.30		mg/Kg	2	10/25/2012 11:38:10 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:38:10 PM
Chromium	7.5	0.60		mg/Kg	2	10/25/2012 11:38:10 PM
Cobalt	3.1	0.60		mg/Kg	2	10/25/2012 11:38:10 PM
Iron	12000	500		mg/Kg	500	11/2/2012 9:14:39 AM
Lead	3.3	0.50		mg/Kg	2	10/25/2012 11:38:10 PM
Manganese	840	2.0		mg/Kg	20	11/2/2012 9:12:14 AM
Nickel	4.7	1.0		mg/Kg	2	10/25/2012 11:38:10 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:38:10 PM
Vanadium	16	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
Zinc	10	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzoic acid	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:10:00 PM
Lab ID: 1210692-016
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 3:55:40 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 3:55:40 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 3:55:40 PM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Isophorone	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2-Methylphenol	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
Nitrobenzene	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:10:00 PM
Lab ID: 1210692-016
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 3:55:40 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Pyridine	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Surr: 2,4,6-Tribromophenol	92.0	21.3-145		%REC	1	10/21/2012 3:55:40 PM
Surr: 2-Fluorobiphenyl	92.8	20-131		%REC	1	10/21/2012 3:55:40 PM
Surr: 2-Fluorophenol	81.3	11.9-130		%REC	1	10/21/2012 3:55:40 PM
Surr: 4-Terphenyl-d14	85.0	25.1-149		%REC	1	10/21/2012 3:55:40 PM
Surr: Nitrobenzene-d5	106	25.6-137		%REC	1	10/21/2012 3:55:40 PM
Surr: Phenol-d5	93.5	20.3-132		%REC	1	10/21/2012 3:55:40 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00109	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Toluene	0.00187	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Ethylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Xylenes, Total	ND	0.00137		mg/Kg	1	10/15/2012 9:01:08 PM
Methyl tert-butyl ether (MTBE)	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2,4-Trimethylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,3,5-Trimethylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dichloroethane (EDC)	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dibromoethane (EDB)	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Naphthalene	ND	0.00137		mg/Kg	1	10/15/2012 9:01:08 PM
1-Methylnaphthalene	ND	0.00274		mg/Kg	1	10/15/2012 9:01:08 PM
2-Methylnaphthalene	ND	0.00274		mg/Kg	1	10/15/2012 9:01:08 PM
Acetone	0.0215	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Bromobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Bromodichloromethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Bromoform	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Bromomethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
2-Butanone	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Carbon tetrachloride	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Chlorobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Chloroethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Chloroform	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Chloromethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
2-Chlorotoluene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:10:00 PM
Lab ID: 1210692-016
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
4-Chlorotoluene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
cis-1,2-DCE	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
cis-1,3-Dichloropropene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dibromo-3-chloropropane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Dibromochloromethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Dibromomethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dichlorobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,3-Dichlorobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,4-Dichlorobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Dichlorodifluoromethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1-Dichloroethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1-Dichloroethene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dichloropropane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,3-Dichloropropane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
2,2-Dichloropropane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1-Dichloropropene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Hexachlorobutadiene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Isopropylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
4-Isopropyltoluene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Methylene chloride	ND	0.00206		mg/Kg	1	10/15/2012 9:01:08 PM
n-Butylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
2-Hexanone	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
n-Propylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
sec-Butylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Styrene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
4-Methyl-2-pentanone	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
tert-Butylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1,1,2-Tetrachloroethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1,2,2-Tetrachloroethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Tetrachloroethene (PCE)	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
trans-1,2-DCE	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
trans-1,3-Dichloropropene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2,3-Trichlorobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2,4-Trichlorobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1,1-Trichloroethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1,2-Trichloroethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Trichloroethene (TCE)	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Trichlorofluoromethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2,3-Trichloropropane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Vinyl chloride	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Surr: 1,2-Dichloroethane-d4	84.9	70-130		%REC	1	10/15/2012 9:01:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-30 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:10:00 PM
Lab ID: 1210692-016
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	1	10/15/2012 9:01:08 PM
Surr: Dibromofluoromethane	92.2	70-130		%REC	1	10/15/2012 9:01:08 PM
Surr: Toluene-d8	86.2	70-130		%REC	1	10/15/2012 9:01:08 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 12:16:38 AM
Surr: BFB	87.9	70-130		%REC	1	10/22/2012 12:16:38 AM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:45:00 PM
Lab ID: 1210692-017
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	12	9.6		mg/Kg	1	10/17/2012 12:09:18 PM
Motor Oil Range Organics (MRO)	72	48		mg/Kg	1	10/17/2012 12:09:18 PM
Surr: DNOP	87.8	77.6-140		%REC	1	10/17/2012 12:09:18 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.083	0.033		mg/kg	1	10/23/2012 5:13:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
Barium	610	2.0		mg/Kg	20	11/2/2012 9:17:31 AM
Beryllium	0.67	0.30		mg/Kg	2	10/25/2012 11:43:54 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:43:54 PM
Chromium	14	0.60		mg/Kg	2	10/25/2012 11:43:54 PM
Cobalt	3.9	0.60		mg/Kg	2	10/25/2012 11:43:54 PM
Iron	13000	500		mg/Kg	500	11/2/2012 9:19:57 AM
Lead	2.6	0.50		mg/Kg	2	10/25/2012 11:43:54 PM
Manganese	500	2.0		mg/Kg	20	11/2/2012 9:17:31 AM
Nickel	10	1.0		mg/Kg	2	10/25/2012 11:43:54 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:43:54 PM
Vanadium	26	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
Zinc	23	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Aniline	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Anthracene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Azobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:45:00 PM
Lab ID: 1210692-017
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Carbazole	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/21/2012 4:25:02 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Chrysene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/21/2012 4:25:02 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/21/2012 4:25:02 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Fluorene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Isophorone	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Naphthalene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
3-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:45:00 PM
Lab ID: 1210692-017
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/21/2012 4:25:02 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Phenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Pyrene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Pyridine	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Surr: 2,4,6-Tribromophenol	109	21.3-145		%REC	1	10/21/2012 4:25:02 PM
Surr: 2-Fluorobiphenyl	108	20-131		%REC	1	10/21/2012 4:25:02 PM
Surr: 2-Fluorophenol	90.7	11.9-130		%REC	1	10/21/2012 4:25:02 PM
Surr: 4-Terphenyl-d14	129	25.1-149		%REC	1	10/21/2012 4:25:02 PM
Surr: Nitrobenzene-d5	98.4	25.6-137		%REC	1	10/21/2012 4:25:02 PM
Surr: Phenol-d5	101	20.3-132		%REC	1	10/21/2012 4:25:02 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00226	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Toluene	0.00888	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Ethylbenzene	0.00199	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Xylenes, Total	0.00906	0.00179		mg/Kg	1	10/15/2012 9:31:58 PM
Methyl tert-butyl ether (MTBE)	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2,4-Trimethylbenzene	0.00341	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,3,5-Trimethylbenzene	0.00139	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dichloroethane (EDC)	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dibromoethane (EDB)	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Naphthalene	ND	0.00179		mg/Kg	1	10/15/2012 9:31:58 PM
1-Methylnaphthalene	ND	0.00358		mg/Kg	1	10/15/2012 9:31:58 PM
2-Methylnaphthalene	ND	0.00358		mg/Kg	1	10/15/2012 9:31:58 PM
Acetone	0.0608	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Bromobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Bromodichloromethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Bromoform	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Bromomethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
2-Butanone	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Carbon tetrachloride	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Chlorobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Chloroethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Chloroform	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Chloromethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
2-Chlorotoluene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:45:00 PM
Lab ID: 1210692-017
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Carbon disulfide	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
4-Chlorotoluene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
cis-1,2-DCE	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
cis-1,3-Dichloropropene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dibromo-3-chloropropane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Dibromochloromethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Dibromomethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dichlorobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,3-Dichlorobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,4-Dichlorobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Dichlorodifluoromethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1-Dichloroethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1-Dichloroethene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dichloropropane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,3-Dichloropropane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
2,2-Dichloropropane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1-Dichloropropene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Hexachlorobutadiene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Isopropylbenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
4-Isopropyltoluene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Methylene chloride	ND	0.00269		mg/Kg	1	10/15/2012 9:31:58 PM
n-Butylbenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
2-Hexanone	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
n-Propylbenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
sec-Butylbenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Styrene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
4-Methyl-2-pentanone	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
tert-Butylbenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1,1,2-Tetrachloroethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1,2,2-Tetrachloroethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Tetrachloroethene (PCE)	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
trans-1,2-DCE	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
trans-1,3-Dichloropropene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2,3-Trichlorobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2,4-Trichlorobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1,1-Trichloroethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1,2-Trichloroethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Trichloroethene (TCE)	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Trichlorofluoromethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2,3-Trichloropropane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Vinyl chloride	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%REC	1	10/15/2012 9:31:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 12:45:00 PM
Lab ID: 1210692-017
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	118	70-130		%REC	1	10/15/2012 9:31:58 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/15/2012 9:31:58 PM
Surr: Toluene-d8	99.8	70-130		%REC	1	10/15/2012 9:31:58 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 12:45:20 AM
Surr: BFB	92.0	70-130		%REC	1	10/22/2012 12:45:20 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.1
Lab ID: 1210692-018 **Matrix:** SOIL

Client Sample ID: SWMU 1-35 (1.5-2')
Collection Date: 10/12/2012 1:00:00 PM
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	15	10		mg/Kg	1	10/17/2012 12:30:54 PM
Motor Oil Range Organics (MRO)	130	51		mg/Kg	1	10/17/2012 12:30:54 PM
Surr: DNOP	91.2	77.6-140		%REC	1	10/17/2012 12:30:54 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	24	5.0		mg/Kg	1	10/22/2012 1:28:54 AM
Surr: BFB	108	84-116		%REC	1	10/22/2012 1:28:54 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.056	0.033		mg/kg	1	10/23/2012 5:18:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
Barium	1200	5.0		mg/Kg	50	11/2/2012 10:14:10 AM
Beryllium	0.46	0.30		mg/Kg	2	10/25/2012 11:49:40 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:49:40 PM
Chromium	11	0.60		mg/Kg	2	10/25/2012 11:49:40 PM
Cobalt	3.4	0.60		mg/Kg	2	10/25/2012 11:49:40 PM
Iron	10000	500		mg/Kg	500	11/2/2012 9:25:14 AM
Lead	2.3	0.50		mg/Kg	2	10/25/2012 11:49:40 PM
Manganese	820	2.0		mg/Kg	20	11/2/2012 9:22:48 AM
Nickel	9.0	1.0		mg/Kg	2	10/25/2012 11:49:40 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:49:40 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
Zinc	22	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Aniline	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Anthracene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Azobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:00:00 PM
Lab ID: 1210692-018
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Carbazole	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/21/2012 4:54:19 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Chrysene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/21/2012 4:54:19 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/21/2012 4:54:19 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Fluorene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Isophorone	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Naphthalene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:00:00 PM
Lab ID: 1210692-018
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/21/2012 4:54:19 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Phenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Pyrene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Pyridine	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Surr: 2,4,6-Tribromophenol	84.3	21.3-145		%REC	1	10/21/2012 4:54:19 PM
Surr: 2-Fluorobiphenyl	82.3	20-131		%REC	1	10/21/2012 4:54:19 PM
Surr: 2-Fluorophenol	76.3	11.9-130		%REC	1	10/21/2012 4:54:19 PM
Surr: 4-Terphenyl-d14	94.7	25.1-149		%REC	1	10/21/2012 4:54:19 PM
Surr: Nitrobenzene-d5	84.6	25.6-137		%REC	1	10/21/2012 4:54:19 PM
Surr: Phenol-d5	81.4	20.3-132		%REC	1	10/21/2012 4:54:19 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00134	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Toluene	0.00572	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Ethylbenzene	0.00141	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Xylenes, Total	0.00512	0.00136		mg/Kg	1	10/16/2012 1:59:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2,4-Trimethylbenzene	0.00197	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,3,5-Trimethylbenzene	0.000762	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dichloroethane (EDC)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dibromoethane (EDB)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Naphthalene	ND	0.00136		mg/Kg	1	10/16/2012 1:59:01 PM
1-Methylnaphthalene	ND	0.00272		mg/Kg	1	10/16/2012 1:59:01 PM
2-Methylnaphthalene	ND	0.00272		mg/Kg	1	10/16/2012 1:59:01 PM
Acetone	0.0525	0.00680		mg/Kg	1	10/16/2012 1:59:01 PM
Bromobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Bromodichloromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Bromoform	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Bromomethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
2-Butanone	ND	0.00680		mg/Kg	1	10/16/2012 1:59:01 PM
Carbon tetrachloride	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Chlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Chloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:00:00 PM
Lab ID: 1210692-018
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Chloromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
2-Chlorotoluene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Carbon disulfide	ND	0.00680		mg/Kg	1	10/16/2012 1:59:01 PM
4-Chlorotoluene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
cis-1,2-DCE	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
cis-1,3-Dichloropropene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dibromo-3-chloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Dibromochloromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Dibromomethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,3-Dichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,4-Dichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Dichlorodifluoromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1-Dichloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1-Dichloroethene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dichloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,3-Dichloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
2,2-Dichloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1-Dichloropropene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Hexachlorobutadiene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Isopropylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
4-Isopropyltoluene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Methylene chloride	ND	0.00204		mg/Kg	1	10/16/2012 1:59:01 PM
n-Butylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
2-Hexanone	ND	0.00680		mg/Kg	1	10/16/2012 1:59:01 PM
n-Propylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
sec-Butylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Styrene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
4-Methyl-2-pentanone	ND	0.00680		mg/Kg	1	10/16/2012 1:59:01 PM
tert-Butylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1,1,2-Tetrachloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1,2,2-Tetrachloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Tetrachloroethene (PCE)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
trans-1,2-DCE	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
trans-1,3-Dichloropropene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2,3-Trichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2,4-Trichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1,1-Trichloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1,2-Trichloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Trichloroethene (TCE)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Trichlorofluoromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:00:00 PM
Lab ID: 1210692-018
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Vinyl chloride	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%REC	1	10/16/2012 1:59:01 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/16/2012 1:59:01 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/16/2012 1:59:01 PM
Surr: Toluene-d8	108	70-130		%REC	1	10/16/2012 1:59:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:10:00 PM
Lab ID: 1210692-019
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/16/2012 5:53:12 PM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/16/2012 5:53:12 PM
Surr: DNOP	95.2	77.6-140		%REC	1	10/16/2012 5:53:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 1:57:42 AM
Surr: BFB	94.8	84-116		%REC	1	10/22/2012 1:57:42 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:20:30 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
Barium	440	2.0		mg/Kg	20	11/2/2012 9:28:08 AM
Beryllium	0.67	0.30		mg/Kg	2	10/25/2012 11:57:27 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:57:27 PM
Chromium	9.8	0.60		mg/Kg	2	10/25/2012 11:57:27 PM
Cobalt	3.6	0.60		mg/Kg	2	10/25/2012 11:57:27 PM
Iron	16000	500		mg/Kg	500	11/2/2012 9:32:13 AM
Lead	3.3	0.50		mg/Kg	2	10/25/2012 11:57:27 PM
Manganese	770	2.0		mg/Kg	20	11/2/2012 9:28:08 AM
Nickel	6.2	1.0		mg/Kg	2	10/25/2012 11:57:27 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:57:27 PM
Vanadium	25	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
Zinc	12	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:10:00 PM
Lab ID: 1210692-019
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 5:23:35 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 5:23:35 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 5:23:35 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:10:00 PM
Lab ID: 1210692-019
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 5:23:35 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Surr: 2,4,6-Tribromophenol	89.2	21.3-145		%REC	1	10/21/2012 5:23:35 PM
Surr: 2-Fluorobiphenyl	87.2	20-131		%REC	1	10/21/2012 5:23:35 PM
Surr: 2-Fluorophenol	84.6	11.9-130		%REC	1	10/21/2012 5:23:35 PM
Surr: 4-Terphenyl-d14	84.6	25.1-149		%REC	1	10/21/2012 5:23:35 PM
Surr: Nitrobenzene-d5	94.5	25.6-137		%REC	1	10/21/2012 5:23:35 PM
Surr: Phenol-d5	88.8	20.3-132		%REC	1	10/21/2012 5:23:35 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00202	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Toluene	0.00423	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Ethylbenzene	0.00107	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Xylenes, Total	0.00434	0.00140		mg/Kg	1	10/15/2012 10:33:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2,4-Trimethylbenzene	0.00177	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,3,5-Trimethylbenzene	0.000722	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dichloroethane (EDC)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dibromoethane (EDB)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Naphthalene	ND	0.00140		mg/Kg	1	10/15/2012 10:33:34 PM
1-Methylnaphthalene	ND	0.00280		mg/Kg	1	10/15/2012 10:33:34 PM
2-Methylnaphthalene	ND	0.00280		mg/Kg	1	10/15/2012 10:33:34 PM
Acetone	0.0381	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
Bromobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Bromodichloromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Bromoform	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Bromomethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
2-Butanone	ND	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
Carbon tetrachloride	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Chlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Chloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:10:00 PM
Lab ID: 1210692-019
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Chloromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
2-Chlorotoluene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Carbon disulfide	ND	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
4-Chlorotoluene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
cis-1,2-DCE	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
cis-1,3-Dichloropropene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dibromo-3-chloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Dibromochloromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Dibromomethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,3-Dichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,4-Dichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Dichlorodifluoromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1-Dichloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1-Dichloroethene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dichloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,3-Dichloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
2,2-Dichloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1-Dichloropropene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Hexachlorobutadiene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Isopropylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
4-Isopropyltoluene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Methylene chloride	ND	0.00210		mg/Kg	1	10/15/2012 10:33:34 PM
n-Butylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
2-Hexanone	ND	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
n-Propylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
sec-Butylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Styrene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
4-Methyl-2-pentanone	ND	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
tert-Butylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1,1,2-Tetrachloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1,2,2-Tetrachloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Tetrachloroethene (PCE)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
trans-1,2-DCE	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
trans-1,3-Dichloropropene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2,3-Trichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2,4-Trichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1,1-Trichloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1,2-Trichloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Trichloroethene (TCE)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Trichlorofluoromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-35 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 1:10:00 PM
Lab ID: 1210692-019
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Vinyl chloride	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	10/15/2012 10:33:34 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/15/2012 10:33:34 PM
Surr: Dibromofluoromethane	110	70-130		%REC	1	10/15/2012 10:33:34 PM
Surr: Toluene-d8	95.2	70-130		%REC	1	10/15/2012 10:33:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210692-020
Matrix: MEOH (SOIL)
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 2:26:31 AM
Surr: BFB	96.1	84-116		%REC	1	10/22/2012 2:26:31 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Toluene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Ethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Naphthalene	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/16/2012 4:17:22 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/16/2012 4:17:22 AM
Acetone	ND	0.75		mg/Kg	1	10/16/2012 4:17:22 AM
Bromobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Bromoform	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Bromomethane	ND	0.15		mg/Kg	1	10/16/2012 4:17:22 AM
2-Butanone	ND	0.50		mg/Kg	1	10/16/2012 4:17:22 AM
Carbon disulfide	ND	0.50		mg/Kg	1	10/16/2012 4:17:22 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Chlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Chloroethane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Chloroform	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Chloromethane	ND	0.15		mg/Kg	1	10/16/2012 4:17:22 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Dibromomethane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210692-020
Matrix: MEOH (SOIL)
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
2-Hexanone	ND	0.50		mg/Kg	1	10/16/2012 4:17:22 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/16/2012 4:17:22 AM
Methylene chloride	ND	0.15		mg/Kg	1	10/16/2012 4:17:22 AM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/16/2012 4:17:22 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Styrene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Vinyl chloride	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Xylenes, Total	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	10/16/2012 4:17:22 AM
Surr: 4-Bromofluorobenzene	91.0	70-130		%REC	1	10/16/2012 4:17:22 AM
Surr: Dibromofluoromethane	89.3	70-130		%REC	1	10/16/2012 4:17:22 AM
Surr: Toluene-d8	97.8	70-130		%REC	1	10/16/2012 4:17:22 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.1
Lab ID: 1210692-021 **Matrix:** SOIL

Client Sample ID: SWMU 1-13 (0-0.5')
Collection Date: 10/12/2012 2:05:00 PM
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	77	10		mg/Kg	1	10/16/2012 6:18:20 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 6:18:20 PM
Surr: DNOP	105	77.6-140		%REC	1	10/16/2012 6:18:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 2:55:20 AM
Surr: BFB	94.8	84-116		%REC	1	10/22/2012 2:55:20 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.12	0.033		mg/kg	1	10/23/2012 5:29:24 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
Arsenic	ND	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
Barium	600	2.0		mg/Kg	20	11/2/2012 9:35:04 AM
Beryllium	0.56	0.30		mg/Kg	2	10/26/2012 12:11:53 AM
Cadmium	ND	0.20		mg/Kg	2	10/26/2012 12:11:53 AM
Chromium	11	0.60		mg/Kg	2	10/26/2012 12:11:53 AM
Cobalt	3.6	0.60		mg/Kg	2	10/26/2012 12:11:53 AM
Iron	13000	500		mg/Kg	500	11/2/2012 9:37:29 AM
Lead	3.5	0.50		mg/Kg	2	10/26/2012 12:11:53 AM
Manganese	590	2.0		mg/Kg	20	11/2/2012 9:35:04 AM
Nickel	6.3	1.0		mg/Kg	2	10/26/2012 12:11:53 AM
Selenium	ND	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
Silver	ND	0.50		mg/Kg	2	10/26/2012 12:11:53 AM
Vanadium	18	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
Zinc	30	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:05:00 PM
Lab ID: 1210692-021
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 10:37:40 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 10:37:40 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 10:37:40 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:05:00 PM
Lab ID: 1210692-021
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 10:37:40 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Surr: 2,4,6-Tribromophenol	92.5	21.3-145		%REC	1	10/21/2012 10:37:40 PM
Surr: 2-Fluorobiphenyl	90.8	20-131		%REC	1	10/21/2012 10:37:40 PM
Surr: 2-Fluorophenol	83.2	11.9-130		%REC	1	10/21/2012 10:37:40 PM
Surr: 4-Terphenyl-d14	77.4	25.1-149		%REC	1	10/21/2012 10:37:40 PM
Surr: Nitrobenzene-d5	97.0	25.6-137		%REC	1	10/21/2012 10:37:40 PM
Surr: Phenol-d5	81.4	20.3-132		%REC	1	10/21/2012 10:37:40 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00154	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Toluene	0.00597	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Ethylbenzene	0.00224	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Xylenes, Total	0.0112	0.00221		mg/Kg	1	10/16/2012 2:29:51 PM
Methyl tert-butyl ether (MTBE)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2,4-Trimethylbenzene	0.00310	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,3,5-Trimethylbenzene	0.00111	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dichloroethane (EDC)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dibromoethane (EDB)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Naphthalene	ND	0.00221		mg/Kg	1	10/16/2012 2:29:51 PM
1-Methylnaphthalene	ND	0.00441		mg/Kg	1	10/16/2012 2:29:51 PM
2-Methylnaphthalene	ND	0.00441		mg/Kg	1	10/16/2012 2:29:51 PM
Acetone	0.128	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
Bromobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Bromodichloromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Bromoform	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Bromomethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
2-Butanone	ND	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
Carbon tetrachloride	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Chlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Chloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:05:00 PM
Lab ID: 1210692-021
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Chloromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
2-Chlorotoluene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Carbon disulfide	ND	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
4-Chlorotoluene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
cis-1,2-DCE	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
cis-1,3-Dichloropropene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dibromo-3-chloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Dibromochloromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Dibromomethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,3-Dichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,4-Dichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Dichlorodifluoromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1-Dichloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1-Dichloroethene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dichloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,3-Dichloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
2,2-Dichloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1-Dichloropropene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Hexachlorobutadiene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Isopropylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
4-Isopropyltoluene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Methylene chloride	ND	0.00331		mg/Kg	1	10/16/2012 2:29:51 PM
n-Butylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
2-Hexanone	ND	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
n-Propylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
sec-Butylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Styrene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
4-Methyl-2-pentanone	ND	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
tert-Butylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1,1,2-Tetrachloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1,2,2-Tetrachloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Tetrachloroethene (PCE)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
trans-1,2-DCE	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
trans-1,3-Dichloropropene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2,3-Trichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2,4-Trichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1,1-Trichloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1,2-Trichloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Trichloroethene (TCE)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Trichlorofluoromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:05:00 PM
Lab ID: 1210692-021
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Vinyl chloride	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	1	10/16/2012 2:29:51 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/16/2012 2:29:51 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/16/2012 2:29:51 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/16/2012 2:29:51 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.1
Lab ID: 1210692-022 **Matrix:** SOIL

Client Sample ID: SWMU 1-13 (1.5-2')
Collection Date: 10/12/2012 2:25:00 PM
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	16	10		mg/Kg	1	10/16/2012 7:08:35 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 7:08:35 PM
Surr: DNOP	92.8	77.6-140		%REC	1	10/16/2012 7:08:35 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 3:24:06 AM
Surr: BFB	97.9	84-116		%REC	1	10/22/2012 3:24:06 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:31:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
Barium	310	1.0		mg/Kg	10	11/2/2012 2:53:36 PM
Beryllium	0.74	0.30		mg/Kg	2	11/2/2012 10:27:47 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:27:47 AM
Chromium	7.1	0.60		mg/Kg	2	11/2/2012 10:27:47 AM
Cobalt	3.8	0.60		mg/Kg	2	11/2/2012 10:27:47 AM
Iron	10000	500		mg/Kg	500	11/2/2012 2:56:03 PM
Lead	3.7	0.50		mg/Kg	2	11/2/2012 10:27:47 AM
Manganese	510	2.0		mg/Kg	20	11/2/2012 3:30:43 PM
Nickel	6.1	1.0		mg/Kg	2	11/2/2012 10:27:47 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:27:47 AM
Vanadium	15	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
Zinc	13	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:25:00 PM
Lab ID: 1210692-022
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 11:06:55 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 11:06:55 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 11:06:55 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:25:00 PM
Lab ID: 1210692-022
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 11:06:55 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Surr: 2,4,6-Tribromophenol	93.5	21.3-145		%REC	1	10/21/2012 11:06:55 PM
Surr: 2-Fluorobiphenyl	98.3	20-131		%REC	1	10/21/2012 11:06:55 PM
Surr: 2-Fluorophenol	86.2	11.9-130		%REC	1	10/21/2012 11:06:55 PM
Surr: 4-Terphenyl-d14	88.1	25.1-149		%REC	1	10/21/2012 11:06:55 PM
Surr: Nitrobenzene-d5	103	25.6-137		%REC	1	10/21/2012 11:06:55 PM
Surr: Phenol-d5	90.5	20.3-132		%REC	1	10/21/2012 11:06:55 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00142	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Toluene	0.00586	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Ethylbenzene	0.00134	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Xylenes, Total	0.00573	0.00165		mg/Kg	1	10/16/2012 3:00:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2,4-Trimethylbenzene	0.00263	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,3,5-Trimethylbenzene	0.00102	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dichloroethane (EDC)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dibromoethane (EDB)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Naphthalene	ND	0.00165		mg/Kg	1	10/16/2012 3:00:38 PM
1-Methylnaphthalene	ND	0.00329		mg/Kg	1	10/16/2012 3:00:38 PM
2-Methylnaphthalene	ND	0.00329		mg/Kg	1	10/16/2012 3:00:38 PM
Acetone	0.0479	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
Bromobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Bromodichloromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Bromoform	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Bromomethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
2-Butanone	ND	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
Carbon tetrachloride	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Chlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Chloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

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Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Chloromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
2-Chlorotoluene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Carbon disulfide	ND	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
4-Chlorotoluene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
cis-1,2-DCE	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
cis-1,3-Dichloropropene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dibromo-3-chloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Dibromochloromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Dibromomethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,3-Dichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,4-Dichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Dichlorodifluoromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1-Dichloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1-Dichloroethene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dichloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,3-Dichloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
2,2-Dichloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1-Dichloropropene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Hexachlorobutadiene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Isopropylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
4-Isopropyltoluene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Methylene chloride	ND	0.00247		mg/Kg	1	10/16/2012 3:00:38 PM
n-Butylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
2-Hexanone	ND	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
n-Propylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
sec-Butylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Styrene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
4-Methyl-2-pentanone	ND	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
tert-Butylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1,1,2-Tetrachloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1,2,2-Tetrachloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Tetrachloroethene (PCE)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
trans-1,2-DCE	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
trans-1,3-Dichloropropene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2,3-Trichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2,4-Trichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1,1-Trichloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1,2-Trichloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Trichloroethene (TCE)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Trichlorofluoromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:25:00 PM
Lab ID: 1210692-022
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Vinyl chloride	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	1	10/16/2012 3:00:38 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/16/2012 3:00:38 PM
Surr: Dibromofluoromethane	94.1	70-130		%REC	1	10/16/2012 3:00:38 PM
Surr: Toluene-d8	86.1	70-130		%REC	1	10/16/2012 3:00:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (2-4')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:35:00 PM
Lab ID: 1210692-023
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/16/2012 11:38:39 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 11:38:39 AM
Surr: DNOP	97.8	77.6-140		%REC	1	10/16/2012 11:38:39 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 3:52:51 AM
Surr: BFB	98.3	84-116		%REC	1	10/22/2012 3:52:51 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.17	0.033		mg/kg	1	10/23/2012 5:33:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
Barium	250	1.0		mg/Kg	10	11/2/2012 3:00:37 PM
Beryllium	0.60	0.30		mg/Kg	2	11/2/2012 10:30:13 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:30:13 AM
Chromium	22	0.60		mg/Kg	2	11/2/2012 10:30:13 AM
Cobalt	4.3	0.60		mg/Kg	2	11/2/2012 10:30:13 AM
Iron	11000	500		mg/Kg	500	11/2/2012 3:03:01 PM
Lead	4.2	0.50		mg/Kg	2	11/2/2012 10:30:13 AM
Manganese	250	1.0		mg/Kg	10	11/2/2012 3:00:37 PM
Nickel	7.0	1.0		mg/Kg	2	11/2/2012 10:30:13 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:30:13 AM
Vanadium	18	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
Zinc	29	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (2-4')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:35:00 PM
Lab ID: 1210692-023
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 3:54:54 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 3:54:54 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 3:54:54 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (2-4')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:35:00 PM
Lab ID: 1210692-023
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 3:54:54 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Surr: 2,4,6-Tribromophenol	102	21.3-145		%REC	1	10/21/2012 3:54:54 AM
Surr: 2-Fluorobiphenyl	89.8	20-131		%REC	1	10/21/2012 3:54:54 AM
Surr: 2-Fluorophenol	88.3	11.9-130		%REC	1	10/21/2012 3:54:54 AM
Surr: 4-Terphenyl-d14	83.4	25.1-149		%REC	1	10/21/2012 3:54:54 AM
Surr: Nitrobenzene-d5	93.8	25.6-137		%REC	1	10/21/2012 3:54:54 AM
Surr: Phenol-d5	92.4	20.3-132		%REC	1	10/21/2012 3:54:54 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Toluene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Ethylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Xylenes, Total	ND	0.00224		mg/Kg	1	10/16/2012 3:31:30 PM
Methyl tert-butyl ether (MTBE)	0.0199	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2,4-Trimethylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,3,5-Trimethylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dichloroethane (EDC)	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dibromoethane (EDB)	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Naphthalene	ND	0.00224		mg/Kg	1	10/16/2012 3:31:30 PM
1-Methylnaphthalene	ND	0.00448		mg/Kg	1	10/16/2012 3:31:30 PM
2-Methylnaphthalene	ND	0.00448		mg/Kg	1	10/16/2012 3:31:30 PM
Acetone	0.0716	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
Bromobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Bromodichloromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Bromoform	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Bromomethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
2-Butanone	ND	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
Carbon tetrachloride	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Chlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Chloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (2-4')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:35:00 PM
Lab ID: 1210692-023
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Chloromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
2-Chlorotoluene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Carbon disulfide	ND	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
4-Chlorotoluene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
cis-1,2-DCE	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
cis-1,3-Dichloropropene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dibromo-3-chloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Dibromochloromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Dibromomethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,3-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,4-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Dichlorodifluoromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1-Dichloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1-Dichloroethene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dichloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,3-Dichloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
2,2-Dichloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1-Dichloropropene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Hexachlorobutadiene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Isopropylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
4-Isopropyltoluene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Methylene chloride	ND	0.00336		mg/Kg	1	10/16/2012 3:31:30 PM
n-Butylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
2-Hexanone	ND	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
n-Propylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
sec-Butylbenzene	0.00128	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Styrene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
4-Methyl-2-pentanone	ND	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
tert-Butylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1,1,2-Tetrachloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1,2,2-Tetrachloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Tetrachloroethene (PCE)	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
trans-1,2-DCE	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
trans-1,3-Dichloropropene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2,3-Trichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2,4-Trichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1,1-Trichloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1,2-Trichloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Trichloroethene (TCE)	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Trichlorofluoromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (2-4')
Project: SWMU NO.1
Collection Date: 10/12/2012 2:35:00 PM
Lab ID: 1210692-023
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Vinyl chloride	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	1	10/16/2012 3:31:30 PM
Surr: 4-Bromofluorobenzene	128	70-130		%REC	1	10/16/2012 3:31:30 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/16/2012 3:31:30 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/16/2012 3:31:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-024
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/16/2012 12:03:32 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/16/2012 12:03:32 PM
Surr: DNOP	99.1	77.6-140		%REC	1	10/16/2012 12:03:32 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 4:21:35 AM
Surr: BFB	95.4	84-116		%REC	1	10/22/2012 4:21:35 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:34:52 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
Barium	120	1.0		mg/Kg	10	11/2/2012 3:05:52 PM
Beryllium	0.71	0.30		mg/Kg	2	11/2/2012 10:32:38 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:32:38 AM
Chromium	7.8	0.60		mg/Kg	2	11/2/2012 10:32:38 AM
Cobalt	4.1	0.60		mg/Kg	2	11/2/2012 10:32:38 AM
Iron	11000	500		mg/Kg	500	11/2/2012 3:08:17 PM
Lead	2.5	0.50		mg/Kg	2	11/2/2012 10:32:38 AM
Manganese	320	1.0		mg/Kg	10	11/2/2012 3:05:52 PM
Nickel	6.6	1.0		mg/Kg	2	11/2/2012 10:32:38 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:32:38 AM
Vanadium	17	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
Zinc	14	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-024
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 4:23:52 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 4:23:52 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 4:23:52 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-024
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 4:23:52 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Surr: 2,4,6-Tribromophenol	103	21.3-145		%REC	1	10/21/2012 4:23:52 AM
Surr: 2-Fluorobiphenyl	96.9	20-131		%REC	1	10/21/2012 4:23:52 AM
Surr: 2-Fluorophenol	88.8	11.9-130		%REC	1	10/21/2012 4:23:52 AM
Surr: 4-Terphenyl-d14	84.5	25.1-149		%REC	1	10/21/2012 4:23:52 AM
Surr: Nitrobenzene-d5	99.5	25.6-137		%REC	1	10/21/2012 4:23:52 AM
Surr: Phenol-d5	94.5	20.3-132		%REC	1	10/21/2012 4:23:52 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Toluene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Ethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Xylenes, Total	ND	0.00229		mg/Kg	1	10/16/2012 4:02:26 PM
Methyl tert-butyl ether (MTBE)	0.00300	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2,4-Trimethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,3,5-Trimethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dichloroethane (EDC)	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dibromoethane (EDB)	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Naphthalene	ND	0.00229		mg/Kg	1	10/16/2012 4:02:26 PM
1-Methylnaphthalene	ND	0.00457		mg/Kg	1	10/16/2012 4:02:26 PM
2-Methylnaphthalene	ND	0.00457		mg/Kg	1	10/16/2012 4:02:26 PM
Acetone	0.0561	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
Bromobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Bromodichloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Bromoform	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Bromomethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
2-Butanone	ND	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
Carbon tetrachloride	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Chlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Chloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-024
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Chloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
2-Chlorotoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Carbon disulfide	ND	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
4-Chlorotoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
cis-1,2-DCE	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
cis-1,3-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dibromo-3-chloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Dibromochloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Dibromomethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,3-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,4-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Dichlorodifluoromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1-Dichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1-Dichloroethene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,3-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
2,2-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Hexachlorobutadiene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Isopropylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
4-Isopropyltoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Methylene chloride	ND	0.00343		mg/Kg	1	10/16/2012 4:02:26 PM
n-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
2-Hexanone	ND	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
n-Propylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
sec-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Styrene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
4-Methyl-2-pentanone	ND	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
tert-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1,1,2-Tetrachloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1,2,2-Tetrachloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Tetrachloroethene (PCE)	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
trans-1,2-DCE	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
trans-1,3-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2,3-Trichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2,4-Trichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1,1-Trichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1,2-Trichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Trichloroethene (TCE)	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Trichlorofluoromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6')
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-024
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Vinyl chloride	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	10/16/2012 4:02:26 PM
Surr: 4-Bromofluorobenzene	90.5	70-130		%REC	1	10/16/2012 4:02:26 PM
Surr: Dibromofluoromethane	95.0	70-130		%REC	1	10/16/2012 4:02:26 PM
Surr: Toluene-d8	88.5	70-130		%REC	1	10/16/2012 4:02:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-025
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/16/2012 12:28:37 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/16/2012 12:28:37 PM
Surr: DNOP	97.6	77.6-140		%REC	1	10/16/2012 12:28:37 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 4:50:17 AM
Surr: BFB	91.2	84-116		%REC	1	10/22/2012 4:50:17 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:40:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
Barium	290	1.0		mg/Kg	10	11/2/2012 3:11:09 PM
Beryllium	0.68	0.30		mg/Kg	2	11/2/2012 10:35:02 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:35:02 AM
Chromium	7.3	0.60		mg/Kg	2	11/2/2012 10:35:02 AM
Cobalt	4.0	0.60		mg/Kg	2	11/2/2012 10:35:02 AM
Iron	11000	500		mg/Kg	500	11/2/2012 3:13:34 PM
Lead	3.0	0.50		mg/Kg	2	11/2/2012 10:35:02 AM
Manganese	310	1.0		mg/Kg	10	11/2/2012 3:11:09 PM
Nickel	6.5	1.0		mg/Kg	2	11/2/2012 10:35:02 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:35:02 AM
Vanadium	16	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
Zinc	14	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-025
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 4:52:46 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 4:52:46 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 4:52:46 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-025
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 4:52:46 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Surr: 2,4,6-Tribromophenol	90.7	21.3-145		%REC	1	10/21/2012 4:52:46 AM
Surr: 2-Fluorobiphenyl	92.2	20-131		%REC	1	10/21/2012 4:52:46 AM
Surr: 2-Fluorophenol	91.5	11.9-130		%REC	1	10/21/2012 4:52:46 AM
Surr: 4-Terphenyl-d14	84.4	25.1-149		%REC	1	10/21/2012 4:52:46 AM
Surr: Nitrobenzene-d5	95.9	25.6-137		%REC	1	10/21/2012 4:52:46 AM
Surr: Phenol-d5	96.3	20.3-132		%REC	1	10/21/2012 4:52:46 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Toluene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Ethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Xylenes, Total	ND	0.00227		mg/Kg	1	10/16/2012 4:33:18 PM
Methyl tert-butyl ether (MTBE)	0.00604	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2,4-Trimethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,3,5-Trimethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dichloroethane (EDC)	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dibromoethane (EDB)	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Naphthalene	ND	0.00227		mg/Kg	1	10/16/2012 4:33:18 PM
1-Methylnaphthalene	ND	0.00455		mg/Kg	1	10/16/2012 4:33:18 PM
2-Methylnaphthalene	ND	0.00455		mg/Kg	1	10/16/2012 4:33:18 PM
Acetone	0.0645	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
Bromobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Bromodichloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Bromoform	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Bromomethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
2-Butanone	ND	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
Carbon tetrachloride	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Chlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Chloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-025
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Chloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
2-Chlorotoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Carbon disulfide	ND	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
4-Chlorotoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
cis-1,2-DCE	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
cis-1,3-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dibromo-3-chloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Dibromochloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Dibromomethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,3-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,4-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Dichlorodifluoromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1-Dichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1-Dichloroethene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,3-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
2,2-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Hexachlorobutadiene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Isopropylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
4-Isopropyltoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Methylene chloride	ND	0.00341		mg/Kg	1	10/16/2012 4:33:18 PM
n-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
2-Hexanone	ND	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
n-Propylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
sec-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Styrene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
4-Methyl-2-pentanone	ND	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
tert-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1,1,2-Tetrachloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1,2,2-Tetrachloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Tetrachloroethene (PCE)	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
trans-1,2-DCE	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
trans-1,3-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2,3-Trichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2,4-Trichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1,1-Trichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1,2-Trichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Trichloroethene (TCE)	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Trichlorofluoromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-13 (4-6') DUP
Project: SWMU NO.1
Collection Date: 10/12/2012 3:00:00 PM
Lab ID: 1210692-025
Matrix: SOIL
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Vinyl chloride	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	10/16/2012 4:33:18 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/16/2012 4:33:18 PM
Surr: Dibromofluoromethane	97.5	70-130		%REC	1	10/16/2012 4:33:18 PM
Surr: Toluene-d8	84.7	70-130		%REC	1	10/16/2012 4:33:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 GW
Project: SWMU NO.1
Collection Date: 10/11/2012 10:00:00 AM
Lab ID: 1210692-026
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	1.0	1.0		mg/L	1	10/16/2012 11:18:43 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/16/2012 11:18:43 PM
Surr: DNOP	112	79.5-166		%REC	1	10/16/2012 11:18:43 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	1.4	0.50		mg/L	5	10/17/2012 10:22:10 PM
Chloride	1100	50		mg/L	100	10/17/2012 10:09:45 PM
Sulfate	500	10		mg/L	20	10/15/2012 1:54:26 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	0.24	0.0020		mg/L	1	10/19/2012 9:09:18 PM
Beryllium	ND	0.0020		mg/L	1	10/19/2012 9:09:18 PM
Cadmium	ND	0.0020		mg/L	1	10/19/2012 9:09:18 PM
Chromium	ND	0.0060		mg/L	1	10/19/2012 9:09:18 PM
Cobalt	0.026	0.0060		mg/L	1	10/19/2012 9:09:18 PM
Iron	2.5	0.10	*	mg/L	5	10/23/2012 1:33:03 PM
Manganese	1.1	0.010	*	mg/L	5	10/19/2012 9:12:15 PM
Nickel	0.26	0.010	*	mg/L	1	10/19/2012 9:09:18 PM
Silver	ND	0.0050		mg/L	1	10/19/2012 9:09:18 PM
Vanadium	ND	0.050		mg/L	1	10/19/2012 9:09:18 PM
Zinc	0.023	0.010		mg/L	1	10/19/2012 9:09:18 PM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0025		mg/L	2.5	10/24/2012 5:14:06 PM
Arsenic	0.0082	0.0025		mg/L	2.5	10/24/2012 5:14:06 PM
Lead	0.0041	0.0025		mg/L	2.5	10/24/2012 5:14:06 PM
Selenium	0.0072	0.0025		mg/L	2.5	11/12/2012 7:36:28 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:35:33 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Acenaphthylene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Aniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Anthracene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Azobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benz(a)anthracene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzoic acid	ND	20		µg/L	1	10/20/2012 7:38:38 PM
Benzyl alcohol	ND	10		µg/L	1	10/20/2012 7:38:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 GW
Project: SWMU NO.1
Collection Date: 10/11/2012 10:00:00 AM
Lab ID: 1210692-026
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Carbazole	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Chloroaniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Chlorophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Chrysene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/20/2012 7:38:38 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Dibenzofuran	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Diethyl phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Dimethyl phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/20/2012 7:38:38 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/20/2012 7:38:38 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/20/2012 7:38:38 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Fluoranthene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Fluorene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Hexachlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Hexachloroethane	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Isophorone	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Methylphenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
3+4-Methylphenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/20/2012 7:38:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 GW
Project: SWMU NO.1
Collection Date: 10/11/2012 10:00:00 AM
Lab ID: 1210692-026
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/20/2012 7:38:38 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Naphthalene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Nitroaniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
3-Nitroaniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Nitroaniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Nitrobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Nitrophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Nitrophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Pentachlorophenol	ND	20		µg/L	1	10/20/2012 7:38:38 PM
Phenanthrene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Phenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Pyrene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Pyridine	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Surr: 2,4,6-Tribromophenol	94.8	42.9-124		%REC	1	10/20/2012 7:38:38 PM
Surr: 2-Fluorobiphenyl	87.0	40-108		%REC	1	10/20/2012 7:38:38 PM
Surr: 2-Fluorophenol	59.8	23.6-94.8		%REC	1	10/20/2012 7:38:38 PM
Surr: 4-Terphenyl-d14	82.4	41.9-103		%REC	1	10/20/2012 7:38:38 PM
Surr: Nitrobenzene-d5	85.3	42.6-114		%REC	1	10/20/2012 7:38:38 PM
Surr: Phenol-d5	45.8	20.3-74.7		%REC	1	10/20/2012 7:38:38 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	1.1	1.0		µg/L	1	10/18/2012 1:11:24 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Methyl tert-butyl ether (MTBE)	130	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 1:11:24 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 1:11:24 AM
Acetone	39	10		µg/L	1	10/18/2012 1:11:24 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 1:11:24 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 1:11:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 GW
Project: SWMU NO.1
Collection Date: 10/11/2012 10:00:00 AM
Lab ID: 1210692-026
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	10		µg/L	1	10/18/2012 1:11:24 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 1:11:24 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 1:11:24 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
4-Isopropyltoluene	12	1.0		µg/L	1	10/18/2012 1:11:24 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 1:11:24 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 1:11:24 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 1:11:24 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-37 GW
Project: SWMU NO.1
Collection Date: 10/11/2012 10:00:00 AM
Lab ID: 1210692-026
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 1:11:24 AM
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	10/18/2012 1:11:24 AM
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	1	10/18/2012 1:11:24 AM
Surr: Dibromofluoromethane	95.6	70-130		%REC	1	10/18/2012 1:11:24 AM
Surr: Toluene-d8	95.4	70-130		%REC	1	10/18/2012 1:11:24 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	0.56	0.050		mg/L	1	10/20/2012 7:59:17 PM
Surr: BFB	93.0	70-130		%REC	1	10/20/2012 7:59:17 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101112
Project: SWMU NO.1
Collection Date: 10/11/2012 3:45:00 PM
Lab ID: 1210692-027
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/16/2012 11:43:35 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/16/2012 11:43:35 PM
Surr: DNOP	106	79.5-166		%REC	1	10/16/2012 11:43:35 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	ND	0.10		mg/L	1	10/17/2012 10:34:35 PM
Chloride	ND	0.50		mg/L	1	10/17/2012 10:34:35 PM
Sulfate	ND	0.50		mg/L	1	10/17/2012 10:34:35 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	10/19/2012 9:15:39 PM
Beryllium	ND	0.0020		mg/L	1	10/19/2012 9:15:39 PM
Cadmium	ND	0.0020		mg/L	1	10/19/2012 9:15:39 PM
Chromium	ND	0.0060		mg/L	1	10/19/2012 9:15:39 PM
Cobalt	ND	0.0060		mg/L	1	10/19/2012 9:15:39 PM
Iron	0.13	0.020		mg/L	1	10/23/2012 1:37:58 PM
Manganese	ND	0.0020		mg/L	1	10/19/2012 9:15:39 PM
Nickel	ND	0.010		mg/L	1	10/19/2012 9:15:39 PM
Silver	ND	0.0050		mg/L	1	10/19/2012 9:15:39 PM
Vanadium	ND	0.050		mg/L	1	10/19/2012 9:15:39 PM
Zinc	ND	0.010		mg/L	1	10/19/2012 9:15:39 PM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0025		mg/L	2.5	10/19/2012 3:29:45 PM
Arsenic	ND	0.0025		mg/L	2.5	10/19/2012 3:29:45 PM
Lead	ND	0.0025		mg/L	2.5	10/19/2012 3:29:45 PM
Selenium	ND	0.0025		mg/L	2.5	10/19/2012 3:29:45 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:37:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Acenaphthylene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Aniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Anthracene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Azobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benz(a)anthracene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzoic acid	ND	20		µg/L	1	10/20/2012 8:07:55 PM
Benzyl alcohol	ND	10		µg/L	1	10/20/2012 8:07:55 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101112
Project: SWMU NO.1
Collection Date: 10/11/2012 3:45:00 PM
Lab ID: 1210692-027
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Carbazole	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Chloroaniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Chlorophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Chrysene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/20/2012 8:07:55 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Dibenzofuran	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Diethyl phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Dimethyl phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/20/2012 8:07:55 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/20/2012 8:07:55 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/20/2012 8:07:55 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Fluoranthene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Fluorene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Hexachlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Hexachloroethane	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Isophorone	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Methylphenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
3+4-Methylphenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/20/2012 8:07:55 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101112
Project: SWMU NO.1
Collection Date: 10/11/2012 3:45:00 PM
Lab ID: 1210692-027
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/20/2012 8:07:55 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Naphthalene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
3-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Nitrobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Nitrophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Nitrophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Pentachlorophenol	ND	20		µg/L	1	10/20/2012 8:07:55 PM
Phenanthrene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Phenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Pyrene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Pyridine	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Surr: 2,4,6-Tribromophenol	96.8	42.9-124		%REC	1	10/20/2012 8:07:55 PM
Surr: 2-Fluorobiphenyl	87.7	40-108		%REC	1	10/20/2012 8:07:55 PM
Surr: 2-Fluorophenol	61.3	23.6-94.8		%REC	1	10/20/2012 8:07:55 PM
Surr: 4-Terphenyl-d14	84.0	41.9-103		%REC	1	10/20/2012 8:07:55 PM
Surr: Nitrobenzene-d5	96.4	42.6-114		%REC	1	10/20/2012 8:07:55 PM
Surr: Phenol-d5	49.5	20.3-74.7		%REC	1	10/20/2012 8:07:55 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 2:07:44 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 2:07:44 AM
Acetone	ND	10		µg/L	1	10/18/2012 2:07:44 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 2:07:44 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 2:07:44 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101112
Project: SWMU NO.1
Collection Date: 10/11/2012 3:45:00 PM
Lab ID: 1210692-027
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	10		µg/L	1	10/18/2012 2:07:44 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 2:07:44 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 2:07:44 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 2:07:44 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 2:07:44 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 2:07:44 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101112
Project: SWMU NO.1
Collection Date: 10/11/2012 3:45:00 PM
Lab ID: 1210692-027
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 2:07:44 AM
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%REC	1	10/18/2012 2:07:44 AM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	1	10/18/2012 2:07:44 AM
Surr: Dibromofluoromethane	93.3	70-130		%REC	1	10/18/2012 2:07:44 AM
Surr: Toluene-d8	93.5	70-130		%REC	1	10/18/2012 2:07:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 8:27:45 PM
Surr: BFB	93.1	70-130		%REC	1	10/20/2012 8:27:45 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101212
Project: SWMU NO.1
Collection Date: 10/12/2012 4:20:00 PM
Lab ID: 1210692-028
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/17/2012 12:08:42 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/17/2012 12:08:42 AM
Surr: DNOP	117	79.5-166		%REC	1	10/17/2012 12:08:42 AM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	ND	0.10		mg/L	1	10/15/2012 5:13:00 PM
Chloride	ND	0.50		mg/L	1	10/15/2012 5:13:00 PM
Sulfate	ND	0.50		mg/L	1	10/15/2012 5:13:00 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	10/17/2012 9:19:39 PM
Beryllium	ND	0.0020		mg/L	1	10/17/2012 9:19:39 PM
Cadmium	ND	0.0020		mg/L	1	10/17/2012 9:19:39 PM
Chromium	ND	0.0060		mg/L	1	10/17/2012 9:19:39 PM
Cobalt	ND	0.0060		mg/L	1	10/17/2012 9:19:39 PM
Iron	ND	0.020		mg/L	1	10/18/2012 1:59:51 PM
Manganese	ND	0.0020		mg/L	1	10/17/2012 9:19:39 PM
Nickel	ND	0.010		mg/L	1	10/17/2012 9:19:39 PM
Silver	ND	0.0050		mg/L	1	10/17/2012 9:19:39 PM
Vanadium	ND	0.050		mg/L	1	10/17/2012 9:19:39 PM
Zinc	ND	0.010		mg/L	1	10/17/2012 9:19:39 PM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/25/2012 7:18:12 PM
Arsenic	ND	0.0010		mg/L	1	10/25/2012 7:18:12 PM
Lead	ND	0.0010		mg/L	1	10/25/2012 7:18:12 PM
Selenium	ND	0.0010		mg/L	1	10/25/2012 7:18:12 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:39:06 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Acenaphthylene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Aniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Anthracene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Azobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benz(a)anthracene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzoic acid	ND	20		µg/L	1	10/20/2012 8:37:13 PM
Benzyl alcohol	ND	10		µg/L	1	10/20/2012 8:37:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101212
Project: SWMU NO.1
Collection Date: 10/12/2012 4:20:00 PM
Lab ID: 1210692-028
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Carbazole	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Chloroaniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Chlorophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Chrysene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/20/2012 8:37:13 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Dibenzofuran	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Diethyl phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Dimethyl phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/20/2012 8:37:13 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/20/2012 8:37:13 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/20/2012 8:37:13 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Fluoranthene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Fluorene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Hexachlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Hexachloroethane	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Isophorone	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Methylphenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
3+4-Methylphenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/20/2012 8:37:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101212
Project: SWMU NO.1
Collection Date: 10/12/2012 4:20:00 PM
Lab ID: 1210692-028
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/20/2012 8:37:13 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Naphthalene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
3-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Nitrobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Nitrophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Nitrophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Pentachlorophenol	ND	20		µg/L	1	10/20/2012 8:37:13 PM
Phenanthrene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Phenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Pyrene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Pyridine	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Surr: 2,4,6-Tribromophenol	90.5	42.9-124		%REC	1	10/20/2012 8:37:13 PM
Surr: 2-Fluorobiphenyl	87.6	40-108		%REC	1	10/20/2012 8:37:13 PM
Surr: 2-Fluorophenol	56.6	23.6-94.8		%REC	1	10/20/2012 8:37:13 PM
Surr: 4-Terphenyl-d14	84.3	41.9-103		%REC	1	10/20/2012 8:37:13 PM
Surr: Nitrobenzene-d5	84.6	42.6-114		%REC	1	10/20/2012 8:37:13 PM
Surr: Phenol-d5	47.1	20.3-74.7		%REC	1	10/20/2012 8:37:13 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 2:35:59 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 2:35:59 AM
Acetone	ND	10		µg/L	1	10/18/2012 2:35:59 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 2:35:59 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 2:35:59 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101212
Project: SWMU NO.1
Collection Date: 10/12/2012 4:20:00 PM
Lab ID: 1210692-028
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	10		µg/L	1	10/18/2012 2:35:59 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 2:35:59 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 2:35:59 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 2:35:59 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 2:35:59 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 2:35:59 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101212
Project: SWMU NO.1
Collection Date: 10/12/2012 4:20:00 PM
Lab ID: 1210692-028
Matrix: AQUEOUS
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 2:35:59 AM
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	1	10/18/2012 2:35:59 AM
Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	1	10/18/2012 2:35:59 AM
Surr: Dibromofluoromethane	94.7	70-130		%REC	1	10/18/2012 2:35:59 AM
Surr: Toluene-d8	95.9	70-130		%REC	1	10/18/2012 2:35:59 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 8:56:02 PM
Surr: BFB	91.6	70-130		%REC	1	10/20/2012 8:56:02 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210692-029
Matrix: TRIP BLANK
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 5:27:32 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 5:27:32 AM
Acetone	ND	10		µg/L	1	10/18/2012 5:27:32 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 5:27:32 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 5:27:32 AM
Carbon disulfide	ND	10		µg/L	1	10/18/2012 5:27:32 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 5:27:32 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 5:27:32 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210692-029
Matrix: TRIP BLANK
Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 5:27:32 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 5:27:32 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 5:27:32 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 5:27:32 AM
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%REC	1	10/18/2012 5:27:32 AM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	1	10/18/2012 5:27:32 AM
Surr: Dibromofluoromethane	91.9	70-130		%REC	1	10/18/2012 5:27:32 AM
Surr: Toluene-d8	93.0	70-130		%REC	1	10/18/2012 5:27:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 9:24:15 PM
Surr: BFB	99.9	70-130		%REC	1	10/20/2012 9:24:15 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number 121017007-001 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-001D / SWMU 1-20 (0-0.5) **Sampling Time** 12:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.247	10/25/2012	CRW	EPA 335.4	
%moisture	1.9	Percent		10/24/2012	CRW	%moisture	

Sample Number 121017007-002 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-002D / SWMU 1-20 (0-0.5) DUP **Sampling Time** 12:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.277	10/25/2012	CRW	EPA 335.4	
%moisture	1.9	Percent		10/24/2012	CRW	%moisture	

Sample Number 121017007-003 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-003D / SWMU 1-20 (1.5-2) **Sampling Time** 12:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.256	10/25/2012	CRW	EPA 335.4	
%moisture	4.9	Percent		10/24/2012	CRW	%moisture	

Sample Number 121017007-004 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-004D / SWMU 1-20 (4-6) **Sampling Time** 12:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.278	10/25/2012	CRW	EPA 335.4	
%moisture	10.4	Percent		10/24/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number 121017007-005 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-005D / SWMU 1-20 (10-12) **Sampling Time** 1:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.293	10/25/2012	CRW	EPA 335.4	
%moisture	14.7	Percent		10/24/2012	CRW	%moisture	

Sample Number 121017007-006 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-006D / SWMU 1-38 (0-0.5) **Sampling Time** 2:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.995	mg/Kg	0.27	10/25/2012	CRW	EPA 335.4	
%moisture	7.9	Percent		10/24/2012	CRW	%moisture	

Sample Number 121017007-007 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-007D / SWMU 1-38 (1.5-2) **Sampling Time** 2:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.299	mg/Kg	0.284	10/25/2012	CRW	EPA 335.4	
%moisture	12.5	Percent		10/24/2012	CRW	%moisture	

Sample Number 121017007-008 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-008D / SWMU 1-38 (6-8) **Sampling Time** 2:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.293	10/25/2012	CRW	EPA 335.4	
%moisture	17	Percent		10/24/2012	CRW	%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number 121017007-009 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-009D / SWMU 1-27 (0-0.5) **Sampling Time** 9:00 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.282	mg/Kg	0.258	10/25/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/24/2012	CRW	%moisture	

Sample Number 121017007-010 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-010D / SWMU 1-27 (1.5-2) **Sampling Time** 9:15 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.26	10/25/2012	CRW	EPA 335.4	
%moisture	4.1	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-011 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-011D / SWMU 1-28 (0-0.5) **Sampling Time** 9:50 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.43	mg/Kg	0.258	10/25/2012	CRW	EPA 335.4	
%moisture	3.6	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-012 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-012D / SWMU 1-28 (1.5-2) **Sampling Time** 10:10 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.267	10/25/2012	CRW	EPA 335.4	
%moisture	6.5	Percent		10/30/2012	CRW	%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number 121017007-013 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-013D / SWMU 1-28 (1.5-2) DUP **Sampling Time** 10:10 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.262	10/26/2012	CRW	EPA 335.4	
%moisture	5	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-014 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-014D / SWMU 1-30 (0-0.5) **Sampling Time** 11:40 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.633	mg/Kg	0.26	10/26/2012	CRW	EPA 335.4	
%moisture	4.1	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-015 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-015D / SWMU 1-30 (1.5-2) **Sampling Time** 12:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.274	10/26/2012	CRW	EPA 335.4	
%moisture	9	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-016 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-016D / SWMU 1-30 (4-6) **Sampling Time** 12:10 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.282	10/26/2012	CRW	EPA 335.4	
%moisture	12.1	Percent		10/30/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number 121017007-017 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-017D / SWMU 1-35 (0-0.5) **Sampling Time** 12:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.276	mg/Kg	0.263	10/26/2012	CRW	EPA 335.4	
%moisture	9.9	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-018 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-018D / SWMU 1-35 (1.5-2) **Sampling Time** 1:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.287	mg/Kg	0.278	10/26/2012	CRW	EPA 335.4	
%moisture	10	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-019 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-019D / SWMU 1-35 (4-6) **Sampling Time** 1:10 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.287	10/26/2012	CRW	EPA 335.4	
%moisture	13.8	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-020 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-021D / SWMU 1-13 (0-0.5) **Sampling Time** 2:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.326	mg/Kg	0.264	10/26/2012	CRW	EPA 335.4	
%moisture	6.5	Percent		10/30/2012	CRW	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
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ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number 121017007-021 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-022D / SWMU 1-13 (1.5-2) **Sampling Time** 2:25 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.271	10/26/2012	CRW	EPA 335.4	
%moisture	8.3	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-022 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-023D / SWMU 1-13 (2-4) **Sampling Time** 2:35 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.279	10/26/2012	CRW	EPA 335.4	
%moisture	11.5	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-023 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-024D / SWMU 1-13 (4-6) **Sampling Time** 3:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.284	10/26/2012	CRW	EPA 335.4	
%moisture	13.7	Percent		10/30/2012	CRW	%moisture	

Sample Number 121017007-024 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-025D / SWMU 1-13 (4-6) DUP **Sampling Time** 3:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.292	10/26/2012	CRW	EPA 335.4	
%moisture	14.9	Percent		10/30/2012	CRW	%moisture	

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number 121017007-025 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-026F / SWMU 1-37 GW **Sampling Time** 10:00 AM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0309	mg/L	0.01	10/24/2012	CRW	EPA 335.4	

Sample Number 121017007-026 **Sampling Date** 10/11/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-027F / EB101112 **Sampling Time** 3:45 PM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/24/2012	CRW	EPA 335.4	

Sample Number 121017007-027 **Sampling Date** 10/12/2012 **Date/Time Received** 10/16/2012 1:16 PM
Client Sample ID 1210692-028F / EB101212 **Sampling Time** 4:20 PM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/26/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181711** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	101	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	98.9	85	115			
Cobalt	0.49	0.0060	0.5000	0	97.1	85	115			
Manganese	0.49	0.0020	0.5000	0	98.1	85	115			
Nickel	0.48	0.010	0.5000	0	95.9	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.52	0.050	0.5000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	98.4	85	115			

Sample ID **1210572-018AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181754** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	101	70	130			
Chromium	0.47	0.0060	0.5000	0	95.0	70	130			
Nickel	0.45	0.010	0.5000	0.001290	90.7	70	130			
Zinc	0.46	0.010	0.5000	0	92.7	70	130			

Sample ID **1210572-018AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181755** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210572-018AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181755** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	99.7	70	130	1.02	20	
Chromium	0.47	0.0060	0.5000	0	93.9	70	130	1.11	20	
Nickel	0.46	0.010	0.5000	0.001290	92.0	70	130	1.48	20	
Zinc	0.46	0.010	0.5000	0	91.7	70	130	1.09	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182483** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182484** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.1	85	115			

Sample ID **1210513-001AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182578** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	100	70	130			

Sample ID **1210513-001AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182579** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.8	70	130	1.41	20	

Sample ID **MB-4388** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183397** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4388** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183397** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS-4388** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183398** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.9	85	115			
Beryllium	0.52	0.0020	0.5000	0	104	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	97.1	85	115			
Cobalt	0.47	0.0060	0.5000	0	93.3	85	115			
Iron	0.47	0.020	0.5000	0	94.4	85	115			
Manganese	0.47	0.0020	0.5000	0	93.4	85	115			
Nickel	0.46	0.010	0.5000	0	92.2	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Vanadium	0.51	0.050	0.5000	0	102	85	115			
Zinc	0.48	0.010	0.5000	0	95.3	85	115			

Sample ID **1210692-027DMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **EB101112** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183451** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.45	0.0020	0.5000	0.001070	90.6	70	130			
Beryllium	0.49	0.0020	0.5000	0	97.3	70	130			
Cadmium	0.48	0.0020	0.5000	0	95.6	70	130			
Chromium	0.46	0.0060	0.5000	0	91.5	70	130			
Cobalt	0.43	0.0060	0.5000	0	86.4	70	130			
Manganese	0.45	0.0020	0.5000	0.001780	89.2	70	130			
Nickel	0.42	0.010	0.5000	0.001690	83.9	70	130			
Silver	0.095	0.0050	0.1000	0	94.9	70	130			
Vanadium	0.49	0.050	0.5000	0	98.2	70	130			
Zinc	0.42	0.010	0.5000	0	83.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210692-027DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **EB101112** Batch ID: **4388** RunNo: **6377**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183452** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.46	0.0020	0.5000	0.001070	91.1	70	130	0.538	20	
Beryllium	0.49	0.0020	0.5000	0	97.1	70	130	0.126	20	
Cadmium	0.48	0.0020	0.5000	0	95.8	70	130	0.190	20	
Chromium	0.46	0.0060	0.5000	0	91.8	70	130	0.347	20	
Cobalt	0.43	0.0060	0.5000	0	86.8	70	130	0.490	20	
Manganese	0.45	0.0020	0.5000	0.001780	89.7	70	130	0.617	20	
Nickel	0.42	0.010	0.5000	0.001690	84.4	70	130	0.521	20	
Silver	0.098	0.0050	0.1000	0	98.2	70	130	3.36	20	
Vanadium	0.49	0.050	0.5000	0	98.2	70	130	0.0244	20	
Zinc	0.42	0.010	0.5000	0	83.9	70	130	0.765	20	

Sample ID **1210692-027DMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **EB101112** Batch ID: **4388** RunNo: **6431**
Prep Date: **10/18/2012** Analysis Date: **10/23/2012** SeqNo: **184811** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.60	0.020	0.5000	0.1311	92.9	70	130			

Sample ID **1210692-027DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **EB101112** Batch ID: **4388** RunNo: **6431**
Prep Date: **10/18/2012** Analysis Date: **10/23/2012** SeqNo: **184812** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.60	0.020	0.5000	0.1311	94.6	70	130	1.40	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4388** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **4388** RunNo: **6368**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183111** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								
Selenium	ND	0.0025								

Sample ID **1209C98-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186650** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.031	0.0010	0.02500	0.005774	102	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186664** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186665** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	104	85	115			
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Lead	0.027	0.0010	0.02500	0	106	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186667** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186668** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1210516-002BMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187056** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	102	70	130			
Lead	0.029	0.0010	0.02500	0.002703	104	70	130			
Selenium	0.026	0.0010	0.02500	0	102	70	130			

Sample ID **1210544-001CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187059** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.2	70	130			
Arsenic	0.027	0.0010	0.02500	0.001693	101	70	130			
Selenium	0.026	0.0010	0.02500	0.001046	100	70	130			

Sample ID **1210724-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187071** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.048	0.0010	0.02500	0.02319	99.5	70	130			

Sample ID **1210724-010AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187081** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.029	0.0010	0.02500	0.004033	101	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.9	85	115			
Arsenic	0.025	0.0010	0.02500	0	100	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187101** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.2	85	115			
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187102** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187103** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB-4738** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **4738** RunNo: **6848**
Prep Date: **11/8/2012** Analysis Date: **11/12/2012** SeqNo: **198392** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0025								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4503** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186274** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-4503** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186276** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.2	80	120			

Sample ID **1210675-003BMS** SampType: **ms** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186299** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	83.0	75	125			

Sample ID **1210675-003BMSD** SampType: **msd** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186300** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0	80.1	75	125	3.62	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6252** RunNo: **6252**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180156** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6252** RunNo: **6252**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180157** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.45	0.10	0.5000	0	90.5	90	110			
Chloride	4.7	0.50	5.000	0	94.6	90	110			
Sulfate	9.8	0.50	10.00	0	97.6	90	110			

Sample ID **1210692-027CMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB101112** Batch ID: **R6252** RunNo: **6252**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180161** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.45	0.10	0.5000	0	89.6	76.6	110			
Chloride	4.7	0.50	5.000	0.1934	90.6	87.8	111			
Sulfate	9.6	0.50	10.00	0	96.4	84.6	122			

Sample ID **1210692-027CMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB101112** Batch ID: **R6252** RunNo: **6252**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180162** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	91.6	76.6	110	2.19	20	
Chloride	4.7	0.50	5.000	0.1934	90.5	87.8	111	0.131	20	
Sulfate	9.6	0.50	10.00	0	95.7	84.6	122	0.694	20	

Sample ID **1210694-001AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6252** RunNo: **6252**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180170** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.2	0.10	0.5000	0.7877	89.9	76.6	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210694-001AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6252** RunNo: **6252**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180171** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.2	0.10	0.5000	0.7877	92.4	76.6	110	0.997	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6330** RunNo: **6330**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182236** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6330** RunNo: **6330**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182237** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	96.6	90	110			
Chloride	4.8	0.50	5.000	0	97.0	90	110			
Sulfate	9.6	0.50	10.00	0	95.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4297** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4297** RunNo: **6226**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **179526** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		90.9	77.6	140			

Sample ID **LCS-4297** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4297** RunNo: **6226**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **179527** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.3	52.6	130			
Surr: DNOP	4.5		5.000		89.5	77.6	140			

Sample ID **MB-4305** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4305** RunNo: **6260**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180406** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.9	77.6	140			

Sample ID **LCS-4305** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4305** RunNo: **6260**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180407** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	71.6	52.6	130			
Surr: DNOP	4.0		5.000		80.0	77.6	140			

Sample ID **1210692-001CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-20 (0-0.5')** Batch ID: **4305** RunNo: **6264**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181188** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	30	9.6	48.17	0	62.7	57.2	146			
Surr: DNOP	3.7		4.817		77.1	77.6	140			S

Sample ID **1210692-001CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-20 (0-0.5')** Batch ID: **4305** RunNo: **6264**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181190** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210692-001CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-20 (0-0.5')** Batch ID: **4305** RunNo: **6264**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181190** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	29	9.8	48.92	0	59.5	57.2	146	3.70	24.5	
Surr: DNOP	4.0		4.892		82.2	77.6	140	0	0	

Sample ID **1210692-022CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-13 (1.5-2')** Batch ID: **4297** RunNo: **6264**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181197** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	9.8	48.83	15.64	42.9	57.2	146			S
Surr: DNOP	3.9		4.883		80.4	77.6	140			

Sample ID **1210692-022CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-13 (1.5-2')** Batch ID: **4297** RunNo: **6264**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181199** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.8	48.83	15.64	58.1	57.2	146	18.4	24.5	
Surr: DNOP	4.0		4.883		82.0	77.6	140	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4332** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **PBW** Batch ID: **4332** RunNo: **6264**
Prep Date: **10/16/2012** Analysis Date: **10/16/2012** SeqNo: **181203** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		106	79.5	166			

Sample ID **LCS-4332** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSW** Batch ID: **4332** RunNo: **6264**
Prep Date: **10/16/2012** Analysis Date: **10/16/2012** SeqNo: **181204** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.7	1.0	5.000	0	74.3	74	157			
Surr: DNOP	0.47		0.5000		93.6	79.5	166			

Sample ID **LCSD-4332** SampType: **LCSD** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSS02** Batch ID: **4332** RunNo: **6264**
Prep Date: **10/16/2012** Analysis Date: **10/16/2012** SeqNo: **181205** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.9	1.0	5.000	0	78.8	74	157	8.99	23	
Surr: DNOP	0.49		0.5000		97.2	79.5	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4362** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4362** RunNo: **6387**
Prep Date: **10/17/2012** Analysis Date: **10/21/2012** SeqNo: **183666** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		90.5	84	116			

Sample ID **LCS-4362** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4362** RunNo: **6387**
Prep Date: **10/17/2012** Analysis Date: **10/21/2012** SeqNo: **183667** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.6	74	117			
Surr: BFB	970		1000		97.3	84	116			

Sample ID **1210803-006AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4362** RunNo: **6387**
Prep Date: **10/17/2012** Analysis Date: **10/21/2012** SeqNo: **183670** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	23	23.26	0	136	70	130			S
Surr: BFB	4200		4651		90.1	84	116			

Sample ID **1210803-006AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4362** RunNo: **6387**
Prep Date: **10/17/2012** Analysis Date: **10/21/2012** SeqNo: **183671** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	25	24.56	0	133	70	130	2.92	22.1	S
Surr: BFB	4400		4912		90.0	84	116	0	0	

Sample ID **MB-4403** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4403** RunNo: **6387**
Prep Date: **10/18/2012** Analysis Date: **10/21/2012** SeqNo: **183713** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.0	84	116			

Sample ID **LCS-4403** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4403** RunNo: **6387**
Prep Date: **10/18/2012** Analysis Date: **10/21/2012** SeqNo: **183714** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.8	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184052** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.8	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID **100ng lcsc** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184056** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.6	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.1	70	130			
Surr: Toluene-d8	0.46		0.5000		91.1	70	130			

Sample ID **1210582-003bms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184057** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	2.7		2.820		95.2	70	130			
Surr: 4-Bromofluorobenzene	2.1		2.820		73.3	70	130			
Surr: Dibromofluoromethane	2.7		2.820		95.5	70	130			
Surr: Toluene-d8	2.7		2.820		95.6	70	130			

Sample ID **1210582-003bmsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184058** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	2.8		2.820		98.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.820		69.9	70	130	0	0	S
Surr: Dibromofluoromethane	2.7		2.820		95.4	70	130	0	0	
Surr: Toluene-d8	2.6		2.820		93.2	70	130	0	0	

Sample ID **mb-4362** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186696** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4362** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186696** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.46		0.5000		92.5	70	130			
Surr: Toluene-d8	0.49		0.5000		98.5	70	130			

Sample ID **lcs-4362** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186792** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.7	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.1	70	130			
Surr: Toluene-d8	0.47		0.5000		94.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4301**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4301**	RunNo: **6259**			
Prep Date: **10/15/2012**	Analysis Date: **10/15/2012**	SeqNo: **180381**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4301** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4301** RunNo: **6259**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **180381** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.6		50.00		87.1	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.1	70	130			
Surr: Dibromofluoromethane	49.1		50.00		98.2	70	130			
Surr: Toluene-d8	43.1		50.00		86.3	70	130			

Sample ID **lcs-4301** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4301** RunNo: **6259**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **180383** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.88	1.00	10.00	0	88.8	60	140			
Toluene	8.84	1.00	10.00	0	88.4	60	140			
Chlorobenzene	9.69	1.00	10.00	0	96.9	60	140			
1,1-Dichloroethene	11.2	1.00	10.00	0	112	60	140			
Trichloroethene (TCE)	9.94	1.00	10.00	0	99.4	60	140			
Surr: 1,2-Dichloroethane-d4	44.2		50.00		88.3	70	130			
Surr: 4-Bromofluorobenzene	47.2		50.00		94.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4301** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4301** RunNo: **6259**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **180383** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	51.4		50.00		103	70	130			
Surr: Toluene-d8	44.0		50.00		87.9	70	130			

Sample ID **mb-4333** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4333** RunNo: **6282**
Prep Date: **10/16/2012** Analysis Date: **10/16/2012** SeqNo: **181101** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4333**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4333**	RunNo: **6282**			
Prep Date: **10/16/2012**	Analysis Date: **10/16/2012**	SeqNo: **181101**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.3		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	46.7		50.00		93.4	70	130			
Surr: Dibromofluoromethane	39.5		50.00		79.1	70	130			
Surr: Toluene-d8	50.6		50.00		101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4333**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4333**	RunNo:	**6282**
Prep Date:	**10/16/2012**	Analysis Date:	**10/16/2012**	SeqNo:	**181103** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	13.0	1.00	12.50	0	104	60	140			
Toluene	10.5	1.00	12.50	0	83.7	60	140			
Chlorobenzene	11.5	1.00	12.50	0	92.3	60	140			
1,1-Dichloroethene	14.0	1.00	12.50	0	112	60	140			
Trichloroethene (TCE)	18.1	1.00	12.50	0	145	60	140			S
Surr: 1,2-Dichloroethane-d4	44.4		50.00		88.8	70	130			
Surr: 4-Bromofluorobenzene	47.2		50.00		94.4	70	130			
Surr: Dibromofluoromethane	39.3		50.00		78.6	70	130			
Surr: Toluene-d8	43.1		50.00		86.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6255**	RunNo: **6255**			
Prep Date:	Analysis Date: **10/15/2012**	SeqNo: **180303**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6255** RunNo: **6255**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180303** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6255** RunNo: **6255**
Prep Date: Analysis Date: **10/15/2012** SeqNo: **180305** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	92.3	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	92.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.2	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R6255**	RunNo: **6255**
Prep Date:	Analysis Date: **10/15/2012**	SeqNo: **180305** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.0		10.00		90.3	70	130			
Surr: Toluene-d8	9.4		10.00		93.9	70	130			

Sample ID **5ml rb-b**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R6340**	RunNo: **6340**
Prep Date:	Analysis Date: **10/17/2012**	SeqNo: **182455** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb-b**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6340**	RunNo: **6340**			
Prep Date:	Analysis Date: **10/17/2012**	SeqNo: **182455**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.8	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6340** RunNo: **6340**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182457** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	105	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	107	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	94.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.7	70	130			
Surr: Toluene-d8	9.6		10.00		96.4	70	130			

Sample ID **1210660-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6340** RunNo: **6340**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182459** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	130	5.0	100.0	19.53	115	66.8	128			
Toluene	120	5.0	100.0	18.25	100	70	130			
Chlorobenzene	99	5.0	100.0	0	98.8	70	130			
1,1-Dichloroethene	110	5.0	100.0	0	109	70	130			
Trichloroethene (TCE)	94	5.0	100.0	0	94.0	70	130			
Surr: 1,2-Dichloroethane-d4	45		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	47		50.00		94.9	70	130			
Surr: Dibromofluoromethane	47		50.00		94.8	70	130			
Surr: Toluene-d8	47		50.00		94.4	70	130			

Sample ID **1210660-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6340** RunNo: **6340**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **182460** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	130	5.0	100.0	19.53	107	66.8	128	6.17	16.7	
Toluene	110	5.0	100.0	18.25	93.5	70	130	5.64	18.7	
Chlorobenzene	98	5.0	100.0	0	98.5	70	130	0.270	19.5	
1,1-Dichloroethene	100	5.0	100.0	0	104	70	130	4.23	16.7	
Trichloroethene (TCE)	92	5.0	100.0	0	91.9	70	130	2.26	17.5	
Surr: 1,2-Dichloroethane-d4	46		50.00		92.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	48		50.00		96.8	70	130	0	0	
Surr: Dibromofluoromethane	47		50.00		94.3	70	130	0	0	
Surr: Toluene-d8	47		50.00		94.8	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4304**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4304**	RunNo: **6287**			
Prep Date: **10/15/2012**	Analysis Date: **10/16/2012**	SeqNo: **181172**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4304** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181172** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.3		3.330		99.2	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		87.3	20	131			
Surr: 2-Fluorophenol	2.9		3.330		86.6	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		77.7	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		86.0	25.6	137			
Surr: Phenol-d5	2.8		3.330		85.1	20.3	132			

Sample ID **lcs-4304** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181173** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4304** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181173** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	0.20	1.670	0	87.0	49.7	98.1			
4-Chloro-3-methylphenol	2.8	0.50	3.330	0	83.9	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	70.1	41.1	96.9			
1,4-Dichlorobenzene	1.2	0.20	1.670	0	70.8	41	97.4			
2,4-Dinitrotoluene	1.8	0.50	1.670	0	107	44.4	104			S
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	84.8	39.1	86.9			
4-Nitrophenol	2.9	0.25	3.330	0	87.7	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.0	36.2	80			
Phenol	2.5	0.20	3.330	0	76.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	71.1	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	79.0	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		98.8	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		89.8	20	131			
Surr: 2-Fluorophenol	2.5		3.330		75.9	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		74.2	25.1	149			
Surr: Nitrobenzene-d5	1.5		1.670		90.6	25.6	137			
Surr: Phenol-d5	2.8		3.330		84.9	20.3	132			

Sample ID **mb-4337** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183352** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4337**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4337**	RunNo: **6376**			
Prep Date: **10/16/2012**	Analysis Date: **10/21/2012**	SeqNo: **183352**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4337** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183352** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		95.0	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		88.8	20	131			
Surr: 2-Fluorophenol	2.5		3.330		75.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		76.8	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		84.4	25.6	137			
Surr: Phenol-d5	2.6		3.330		78.4	20.3	132			

Sample ID **lcs-4337** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183353** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	72.3	49.7	98.1			
4-Chloro-3-methylphenol	2.5	0.50	3.330	0	75.5	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	68.0	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	66.6	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	76.5	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	74.5	39.1	86.9			
4-Nitrophenol	2.1	0.25	3.330	0	63.7	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.9	36.2	80			
Phenol	2.2	0.20	3.330	0	66.8	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	74.5	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	78.7	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		89.9	20	131			
Surr: 2-Fluorophenol	2.4		3.330		71.3	11.9	130			
Surr: 4-Terphenyl-d14	1.4		1.670		85.9	25.1	149			
Surr: Nitrobenzene-d5	1.6		1.670		93.1	25.6	137			
Surr: Phenol-d5	2.9		3.330		86.8	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210653-001CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4304** RunNo: **6376**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183387** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.40	1.664	0	74.7	25.6	142			
4-Chloro-3-methylphenol	2.6	1.0	3.318	0	78.7	63.7	100			
2-Chlorophenol	2.4	0.40	3.318	0	73.0	22.2	126			
1,4-Dichlorobenzene	1.1	0.40	1.664	0	69.0	12.4	115			
2,4-Dinitrotoluene	1.3	1.0	1.664	0	78.8	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.40	1.664	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.50	3.318	0	73.6	36.7	130			
Pentachlorophenol	2.2	0.80	3.318	0	66.4	15.8	113			
Phenol	2.5	0.40	3.318	0	73.9	25.1	124			
Pyrene	1.5	0.40	1.664	0	88.1	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.40	1.664	0	82.7	30	113			
Surr: 2,4,6-Tribromophenol	3.3		3.318		101	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.664		94.0	20	131			
Surr: 2-Fluorophenol	2.9		3.318		88.7	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.664		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.664		103	25.6	137			
Surr: Phenol-d5	3.2		3.318		97.8	20.3	132			

Sample ID **1210692-010CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-27 (1.5-2')** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183388** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.680	0	74.0	25.6	142			
4-Chloro-3-methylphenol	2.5	0.50	3.350	0	75.2	63.7	100			
2-Chlorophenol	2.4	0.20	3.350	0	70.8	22.2	126			
1,4-Dichlorobenzene	1.2	0.20	1.680	0	71.7	12.4	115			
2,4-Dinitrotoluene	1.3	0.50	1.680	0	79.4	14.9	142			
N-Nitrosodi-n-propylamine	1.3	0.20	1.680	0	79.8	13.9	136			
4-Nitrophenol	2.4	0.25	3.350	0.08908	69.3	36.7	130			
Pentachlorophenol	2.2	0.40	3.350	0	67.0	15.8	113			
Phenol	2.3	0.20	3.350	0	69.6	25.1	124			
Pyrene	1.2	0.20	1.680	0	74.2	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.20	1.680	0	83.9	30	113			
Surr: 2,4,6-Tribromophenol	3.3		3.350		97.8	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.680		94.5	20	131			
Surr: 2-Fluorophenol	2.7		3.350		79.9	11.9	130			
Surr: 4-Terphenyl-d14	1.4		1.680		83.3	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.680		104	25.6	137			
Surr: Phenol-d5	3.1		3.350		93.0	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210653-001CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4304** RunNo: **6376**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183389** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.40	1.672	0	75.2	25.6	142	1.09	22	
4-Chloro-3-methylphenol	2.4	1.0	3.334	0	73.0	63.7	100	7.05	27.3	
2-Chlorophenol	2.3	0.40	3.334	0	67.8	22.2	126	6.86	26.3	
1,4-Dichlorobenzene	1.0	0.40	1.672	0	61.9	12.4	115	10.4	27.4	
2,4-Dinitrotoluene	1.3	1.0	1.672	0	77.2	14.9	142	1.50	27.4	
N-Nitrosodi-n-propylamine	1.3	0.40	1.672	0	75.4	13.9	136	7.14	22.6	
4-Nitrophenol	2.4	0.50	3.334	0	73.4	36.7	130	0.281	20	
Pentachlorophenol	2.2	0.80	3.334	0	66.2	15.8	113	0.258	27.1	
Phenol	2.1	0.40	3.334	0	62.9	25.1	124	15.6	32.2	
Pyrene	1.3	0.40	1.672	0	79.2	35.8	124	10.1	29.5	
1,2,4-Trichlorobenzene	1.3	0.40	1.672	0	80.6	30	113	2.14	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.334		92.3	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.672		87.3	20	131	0	0	
Surr: 2-Fluorophenol	2.8		3.334		83.7	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.672		84.8	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.5		1.672		91.5	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.334		88.5	20.3	132	0	0	

Sample ID **1210692-010CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-27 (1.5-2')** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183390** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.20	1.671	0	76.8	25.6	142	3.14	22	
4-Chloro-3-methylphenol	2.7	0.50	3.332	0	79.6	63.7	100	5.18	27.3	
2-Chlorophenol	2.3	0.20	3.332	0	70.1	22.2	126	1.57	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.671	0	68.7	12.4	115	4.83	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.671	0	80.6	14.9	142	0.963	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.671	0	80.6	13.9	136	0.435	22.6	
4-Nitrophenol	2.5	0.25	3.332	0.08908	70.9	36.7	130	1.76	20	
Pentachlorophenol	2.1	0.40	3.332	0	63.8	15.8	113	5.36	27.1	
Phenol	2.3	0.20	3.332	0	68.6	25.1	124	1.93	32.2	
Pyrene	1.2	0.20	1.671	0	71.2	35.8	124	4.60	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.671	0	83.7	30	113	0.749	27.8	
Surr: 2,4,6-Tribromophenol	3.2		3.332		97.1	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.6		1.671		98.0	20	131	0	0	
Surr: 2-Fluorophenol	2.6		3.332		76.9	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.671		78.6	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.7		1.671		101	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.332		89.3	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4322**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4322**	RunNo: **6287**			
Prep Date: **10/16/2012**	Analysis Date: **10/16/2012**	SeqNo: **181174**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4322**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4322**	RunNo: **6287**			
Prep Date: **10/16/2012**	Analysis Date: **10/16/2012**	SeqNo: **181174**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	140		200.0		71.8	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		86.2	37	114			
Surr: 2-Fluorophenol	110		200.0		56.3	23.4	98			
Surr: 4-Terphenyl-d14	76		100.0		75.8	41.3	116			
Surr: Nitrobenzene-d5	98		100.0		97.6	39.5	118			
Surr: Phenol-d5	100		200.0		52.2	20.9	95.9			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4322** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **4322** RunNo: **6287**
Prep Date: **10/16/2012** Analysis Date: **10/16/2012** SeqNo: **181175** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	77.2	38.2	99.4			
4-Chloro-3-methylphenol	170	10	200.0	0	85.8	35.5	108			
2-Chlorophenol	150	10	200.0	0	74.2	29.8	106			
1,4-Dichlorobenzene	57	10	100.0	0	57.1	32.6	91.5			
2,4-Dinitrotoluene	98	10	100.0	0	98.4	44.7	112			
N-Nitrosodi-n-propylamine	89	10	100.0	0	88.6	38.5	105			
4-Nitrophenol	75	10	200.0	0	37.6	11.6	73.1			
Pentachlorophenol	86	20	200.0	0	42.8	20.2	93			
Phenol	92	10	200.0	0	46.2	23	66.1			
Pyrene	76	10	100.0	0	76.1	40.1	101			
1,2,4-Trichlorobenzene	66	10	100.0	0	65.6	37.7	99.1			
Surr: 2,4,6-Tribromophenol	170		200.0		85.9	44.2	126			
Surr: 2-Fluorobiphenyl	79		100.0		78.9	37	114			
Surr: 2-Fluorophenol	120		200.0		58.0	23.4	98			
Surr: 4-Terphenyl-d14	81		100.0		80.7	41.3	116			
Surr: Nitrobenzene-d5	85		100.0		84.6	39.5	118			
Surr: Phenol-d5	100		200.0		52.3	20.9	95.9			

Sample ID **lcsd-4322** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **4322** RunNo: **6287**
Prep Date: **10/16/2012** Analysis Date: **10/16/2012** SeqNo: **181176** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	78	10	100.0	0	77.9	38.2	99.4	0.980	20	
4-Chloro-3-methylphenol	180	10	200.0	0	88.1	35.5	108	2.61	20	
2-Chlorophenol	150	10	200.0	0	76.6	29.8	106	3.08	20	
1,4-Dichlorobenzene	60	10	100.0	0	59.6	32.6	91.5	4.28	20	
2,4-Dinitrotoluene	110	10	100.0	0	106	44.7	112	7.64	20	
N-Nitrosodi-n-propylamine	89	10	100.0	0	88.7	38.5	105	0.113	20	
4-Nitrophenol	100	10	200.0	0	50.4	11.6	73.1	28.9	20	R
Pentachlorophenol	110	20	200.0	0	55.0	20.2	93	25.2	20	R
Phenol	97	10	200.0	0	48.6	23	66.1	5.21	20	
Pyrene	81	10	100.0	0	81.0	40.1	101	6.19	20	
1,2,4-Trichlorobenzene	66	10	100.0	0	66.3	37.7	99.1	0.970	20	
Surr: 2,4,6-Tribromophenol	190		200.0		93.8	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	82		100.0		81.6	37	114	0	0	
Surr: 2-Fluorophenol	120		200.0		60.8	23.4	98	0	0	
Surr: 4-Terphenyl-d14	78		100.0		78.5	41.3	116	0	0	
Surr: Nitrobenzene-d5	86		100.0		85.7	39.5	118	0	0	
Surr: Phenol-d5	110		200.0		53.9	20.9	95.9	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4424** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4424** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185307** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4424** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4424** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185308** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Sample ID **1210692-019CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-35 (4-6')** Batch ID: **4424** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185333** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1641	0.01987	98.5	75	125			

Sample ID **1210692-019CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-35 (4-6')** Batch ID: **4424** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185334** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1665	0.01987	100	75	125	2.83	20	

Sample ID **MB-4425** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4425** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185335** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4425** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4425** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185336** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	99.4	80	120			

Sample ID **1210811-014CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4425** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185361** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1670	0.02118	109	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210811-014CMSD**	SampType:	**MSD**	TestCode:	**EPA Method 7471: Mercury**
Client ID:	**BatchQC**	Batch ID:	**4425**	RunNo:	**6443**
Prep Date:	**10/19/2012**	Analysis Date:	**10/23/2012**	SeqNo:	**185362** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1653	0.02118	109	75	125	1.12	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4498** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4498** RunNo: **6499**
Prep Date: **10/24/2012** Analysis Date: **10/25/2012** SeqNo: **187241** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4498** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4498** RunNo: **6499**
Prep Date: **10/24/2012** Analysis Date: **10/25/2012** SeqNo: **187242** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	95.8	80	120			
Arsenic	26	2.5	25.00	0	104	80	120			
Barium	24	0.10	25.00	0	97.3	80	120			
Beryllium	26	0.15	25.00	0	104	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	24	0.30	25.00	0	97.8	80	120			
Cobalt	24	0.30	25.00	0	95.8	80	120			
Lead	25	0.25	25.00	0	99.0	80	120			
Manganese	24	0.10	25.00	0.03500	95.1	80	120			
Nickel	24	0.50	25.00	0	94.9	80	120			
Selenium	25	2.5	25.00	0	102	80	120			
Silver	5.1	0.25	5.000	0	102	80	120			
Vanadium	25	2.5	25.00	0	101	80	120			
Zinc	24	2.5	25.00	0	97.2	80	120			

Sample ID **MB-4499** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4499** RunNo: **6598**
Prep Date: **10/24/2012** Analysis Date: **10/31/2012** SeqNo: **190715** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4499** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4499** RunNo: **6598**
Prep Date: **10/24/2012** Analysis Date: **10/31/2012** SeqNo: **190715** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								

Sample ID **LCS-4499** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4499** RunNo: **6598**
Prep Date: **10/24/2012** Analysis Date: **10/31/2012** SeqNo: **190716** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	27	2.5	25.00	0	108	80	120			
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	26	0.10	25.00	0	104	80	120			
Beryllium	28	0.15	25.00	0.01050	114	80	120			
Cadmium	27	0.10	25.00	0	108	80	120			
Chromium	26	0.30	25.00	0	102	80	120			
Lead	27	0.25	25.00	0	106	80	120			
Manganese	26	0.10	25.00	0.02950	103	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	32	2.5	25.00	0	128	80	120			S
Silver	5.1	0.25	5.000	0	101	80	120			
Vanadium	26	2.5	25.00	0.08900	105	80	120			

Sample ID **MB-4498** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4498** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID **LCS-4498** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4498** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192434** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4499** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4499** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192435** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.30								
Iron	ND	1.0								
Selenium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4499** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4499** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192436** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	26	0.30	25.00	0	102	80	120			
Iron	27	1.0	25.00	0	106	80	120			
Selenium	29	2.5	25.00	0	117	80	120			
Zinc	27	2.5	25.00	0	106	80	120			

Sample ID **1210692-013CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-28 (1.5-2')** Batch ID: **4498** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192482** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.95	0	33.2	75	125			S
Arsenic	26	12	24.95	0	103	75	125			
Beryllium	27	0.75	24.95	0.5601	107	75	125			
Cadmium	25	0.50	24.95	0	102	75	125			
Chromium	34	1.5	24.95	5.956	111	75	125			
Cobalt	29	1.5	24.95	4.075	99.1	75	125			
Lead	26	1.2	24.95	3.120	93.7	75	125			
Nickel	29	2.5	24.95	4.818	98.6	75	125			
Selenium	20	12	24.95	0	78.9	75	125			
Silver	5.0	1.2	4.990	0	101	75	125			
Vanadium	47	12	24.95	21.58	104	75	125			
Zinc	39	12	24.95	11.91	109	75	125			

Sample ID **1210692-013CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-28 (1.5-2')** Batch ID: **4498** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192483** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	24.98	0	33.0	75	125	0	20	S
Arsenic	27	13	24.98	0	107	75	125	4.04	20	
Beryllium	27	0.75	24.98	0.5601	106	75	125	0.755	20	
Cadmium	25	0.50	24.98	0	100	75	125	1.44	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210692-013CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-28 (1.5-2')** Batch ID: **4498** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192483** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	32	1.5	24.98	5.956	105	75	125	4.87	20	
Cobalt	28	1.5	24.98	4.075	96.5	75	125	2.12	20	
Lead	26	1.3	24.98	3.120	92.3	75	125	1.22	20	
Nickel	29	2.5	24.98	4.818	96.9	75	125	1.36	20	
Selenium	20	13	24.98	0	78.7	75	125	0.233	20	
Silver	5.0	1.3	4.995	0	99.2	75	125	1.49	20	
Vanadium	46	13	24.98	21.58	98.0	75	125	2.96	20	
Zinc	38	13	24.98	11.91	105	75	125	2.99	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **PBS** Batch ID: **R6402** RunNo: **6402**
Prep Date: Analysis Date: **10/21/2012** SeqNo: **184129** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		95.0	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6402** RunNo: **6402**
Prep Date: Analysis Date: **10/21/2012** SeqNo: **184130** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.2	74.6	137			
Surr: BFB	480		500.0		95.9	70	130			

Sample ID **1210692-001bms** SampType: **MS** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **SWMU 1-20 (0-0.5')** Batch ID: **R6402** RunNo: **6402**
Prep Date: Analysis Date: **10/21/2012** SeqNo: **184148** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	5.0	19.34	2.932	82.1	50.3	148			
Surr: BFB	350		386.8		91.5	70	130			

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **PBS** Batch ID: **R6485** RunNo: **6485**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186673** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	450		500.0		89.4	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6485** RunNo: **6485**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186676** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	470		500.0		93.0	70	130			

Sample ID **1210910-005A MS** SampType: **MS** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6485** RunNo: **6485**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186678** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	340		364.4		94.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210910-005A MSD** SampType: **MSD** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6485** RunNo: **6485**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186679** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	310		364.4		85.8	70	130	0	0	

Sample ID **mb-4362** SampType: **MBLK** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **PBS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186691** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	460		500.0		92.1	70	130			

Sample ID **LCS-4362** SampType: **LCS** TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **LCSS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186692** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.4	74.6	137			
Surr: BFB	450		500.0		89.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210692**
20-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **b6** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184074** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		95.8	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184077** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	86.2	85	115			
Surr: BFB	10		10.00		99.9	70	130			

Sample ID **1210660-001ams** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184078** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.0	0.25	2.500	1.915	82.1	70	130			
Surr: BFB	46		50.00		91.6	70	130			

Sample ID **1210660-001amsd** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184079** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3.8	0.25	2.500	1.915	76.4	70	130	3.70	20	
Surr: BFB	51		50.00		102	70	130	0	0	

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6402** RunNo: **6402**
Prep Date: Analysis Date: **10/21/2012** SeqNo: **184122** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.5		10.00		95.0	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6402** RunNo: **6402**
Prep Date: Analysis Date: **10/21/2012** SeqNo: **184125** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	85	115			
Surr: BFB	9.6		10.00		95.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210692

Received by/date: AF 10/13/12

Logged By: **Michelle Garcia** 10/13/2012 8:30:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/15/2012 9:55:26 AM Michelle Garcia

Reviewed By: 10/15/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 3 3 (<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Not Present			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210092	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/1/12	1220	SOIL	SWMU 1-20 (0-0.5)	2 VIALS	SOBI	-001										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1220		SWMU 1-20 (0-0.5')	2 VIALS	SOBI	-002										X						
			DUP	2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1230		SWMU 1-20 (1.5-2')	2 VIALS	SOBI	-003										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1245		SWMU 1-20 (4-6')	2 VIALS	SOBI	-004										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/13/12	08:30	[signature]	[signature]	10/13/12	8:30
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No.1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210692	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/11/12	1300	SOIL	SWMU 1-20(10-12')	2VIALS	SOBI	-005										X						
				2VIALS	MeOH											X						
				3JARS	—											X	X	X	X			
	1420		SWMU 1-38(0-0.5')	2VIALS	SOBI	-006										X						
				2VIALS	MeOH											X						
				3JARS	—											X	X	X	X			
	1430		SWMU 1-38(1.5-2')	2VIALS	SOBI	-007										X						
				2VIALS	MeOH											X						
				3JARS	—											X	X	X	X	X		
	1445		SWMU 1-38(6-8')	2VIALS	SOBI	-008										X						
				2VIALS	MeOH											X						
				3JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/13/12	08:30	[signature]	[signature]	10/13/12	0830
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH – RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH – RPS
Sampler: TRACY PAYNE – RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210092	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/12/12	0900	SOIL	SWMU 1-27(0-0.5)	2 VIALS	SOBI	-009										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	0915		SWMU 1-27(1.5-2)	2 VIALS	SOBI	-010										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	0950		SWMU 1-28(0-0.5)	2 VIALS	SOBI	-011										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1010		SWMU 1-28(1.5-2)	2 VIALS	SOBI	-012										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/13/12	0830	[signature]	[signature]	10/13/12	0830
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 21°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210092	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/12/12	1010	SOIL	SWMU 1-28(1.5-2)	2 VIALS	SOBI	-013										X						
↓	↓	↓	DUP	2 VIALS	MEOH											X						
			↓	3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/13/12	0830	[signature]	[signature]	10/13/12	0830
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH – RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH – RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210092	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/12/12	1140	SOIL	SWMU 1-30(0-0.5')	2 VIALS	SOBI	-014										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1200		SWMU 1-30(1.5-2')	2 VIALS	SOBI	-015										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1210		SWMU 1-30(4-6')	2 VIALS	SOBI	-016										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1245		SWMU 1-35(0-0.5')	2 VIALS	SOBI	-017										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date Time
10/13/12	0830	[signature]	[signature]	10/13/12 0830
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210092	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/12/12	1300	SOIL	SWMU 1-35(1.5'-2')	2 VIALS	SOBI	-018										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1310		SWMU 1-35(4-6')	2 VIALS	SOBI	-019										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
10/13/12	—	MEOH	MEOH BLANK	2 VIALS	MEOH	-020										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/13/12	0830	[signature]	[signature]	10/13/12	0830
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation ☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

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Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210692	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/12/12	1405	SOIL	SWMU 1-13(0-0.5')	2VIALS	SOBI	-021										X						
				2VIALS	MEOH											X						
				3JARS	—											X	X	X	X			
	1425		SWMU 1-13(1.5-2')	2VIALS	SOBI	-022										X						
				2VIALS	MEOH											X						
				3JARS	—											X	X	X	X			
	1435		SWMU 1-13(2-4')	2VIALS	SOBI	-023										X						
				2VIALS	MEOH											X						
				3JARS	—											X	X	X	X			
	1500		SWMU 1-13(4-6')	2VIALS	SOBI	-024										X						
				2VIALS	MEOH											X						
				3JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/13/12	0830	[signature]	[signature]	10/13/12	0830
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Remarks:

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Client: WESTERN REFINING SW, INC. GALLUP REFINERY

Mailing Address: ROUTE 3 BOX 7 GALLUP NM 87301

Phone #: 505-722-0217

email or Fax#: SCOTT CROUCH-RPS

QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ NELAP ☐ Other ____ ☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____

Project Name: SWMU No. 1

Project #:

Project Manager: SCOTT CROUCH-RPS

Sampler: TRACY PAYNE-RPS

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.1°C

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210692	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/12/12	1500	SOIL	SWMU1-13(4-6')	2 VIALS	SOBI	-025										X						
↓	↓	↓	DUP	2 VIALS	MEOH											X						
				2 JARS	—											X	X	X	X			

Date	Time	Relinquished by:	Received by:	Date	Time
10/13/12	0830	[signature]	[signature]	10/12/12	0830
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QA/QC Package:
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☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210692	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/11/12	1000	GW	SWMU 1-37 GW	6 VOA	HCL & NEAT	-026										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			
	1545	W	EB101112	6 VOA	HCL & NEAT	-027										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/13/12	0830	[signature]	[signature]	10/13/12	0830
Date:	Time:	Relinquished by:	Received by:	Date	Time

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email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210692	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	METALS				Air Bubbles (Y or N)
10/12/12	1620	W	EB101212	6 VOA	HCL	-628										X						
				1 AMBER	—												X					
				1 PLASTIC	HNO_3													X				
				1 PLASTIC	NaOH													X				
				1 PLASTIC	—													X				

Date	Time	Relinquished by	Received by	Date	Time
10/13/12	0830	[signature]	[signature]	10/13/12	0830
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cn

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 28, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210811

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 18 sample(s) on 10/17/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 10:55:00 AM
Lab ID: 1210811-001
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/19/2012 7:02:56 PM
Motor Oil Range Organics (MRO)	280	50		mg/Kg	1	10/19/2012 7:02:56 PM
Surr: DNOP	99.5	77.6-140		%REC	1	10/19/2012 7:02:56 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 12:12:24 AM
Surr: BFB	92.8	84-116		%REC	1	10/23/2012 12:12:24 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.18	0.033		mg/kg	1	10/23/2012 5:43:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
Barium	620	2.0		mg/Kg	20	11/2/2012 3:25:22 PM
Beryllium	0.71	0.30		mg/Kg	2	11/2/2012 10:39:08 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:39:08 AM
Chromium	24	0.60		mg/Kg	2	11/2/2012 10:39:08 AM
Cobalt	5.0	0.60		mg/Kg	2	11/2/2012 10:39:08 AM
Iron	12000	500		mg/Kg	500	11/2/2012 3:27:50 PM
Lead	7.0	0.50		mg/Kg	2	11/2/2012 10:39:08 AM
Manganese	600	2.0		mg/Kg	20	11/2/2012 3:25:22 PM
Nickel	15	1.0		mg/Kg	2	11/2/2012 10:39:08 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:39:08 AM
Vanadium	21	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
Zinc	53	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Aniline	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Anthracene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Azobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 10:55:00 AM
Lab ID: 1210811-001
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Carbazole	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/21/2012 11:36:12 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Chrysene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/21/2012 11:36:12 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/21/2012 11:36:12 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Fluorene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Isophorone	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Naphthalene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 10:55:00 AM
Lab ID: 1210811-001
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/21/2012 11:36:12 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Phenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Pyrene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Pyridine	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Surr: 2,4,6-Tribromophenol	113	21.3-145		%REC	1	10/21/2012 11:36:12 PM
Surr: 2-Fluorobiphenyl	105	20-131		%REC	1	10/21/2012 11:36:12 PM
Surr: 2-Fluorophenol	87.6	11.9-130		%REC	1	10/21/2012 11:36:12 PM
Surr: 4-Terphenyl-d14	129	25.1-149		%REC	1	10/21/2012 11:36:12 PM
Surr: Nitrobenzene-d5	97.8	25.6-137		%REC	1	10/21/2012 11:36:12 PM
Surr: Phenol-d5	95.1	20.3-132		%REC	1	10/21/2012 11:36:12 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00139	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Toluene	0.00215	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Ethylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Xylenes, Total	ND	0.00153		mg/Kg	1	10/18/2012 12:09:33 AM
Methyl tert-butyl ether (MTBE)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2,4-Trimethylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,3,5-Trimethylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dichloroethane (EDC)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dibromoethane (EDB)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Naphthalene	ND	0.00153		mg/Kg	1	10/18/2012 12:09:33 AM
1-Methylnaphthalene	ND	0.00306		mg/Kg	1	10/18/2012 12:09:33 AM
2-Methylnaphthalene	ND	0.00306		mg/Kg	1	10/18/2012 12:09:33 AM
Acetone	0.0395	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
Bromobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Bromodichloromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Bromoform	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Bromomethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
2-Butanone	ND	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
Carbon tetrachloride	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Chlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Chloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 10:55:00 AM
Lab ID: 1210811-001
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Chloromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
2-Chlorotoluene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Carbon disulfide	ND	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
4-Chlorotoluene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
cis-1,2-DCE	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
cis-1,3-Dichloropropene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dibromo-3-chloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Dibromochloromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Dibromomethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,3-Dichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,4-Dichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Dichlorodifluoromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1-Dichloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1-Dichloroethene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dichloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,3-Dichloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
2,2-Dichloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1-Dichloropropene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Hexachlorobutadiene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Isopropylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
4-Isopropyltoluene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Methylene chloride	ND	0.00230		mg/Kg	1	10/18/2012 12:09:33 AM
n-Butylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
2-Hexanone	ND	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
n-Propylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
sec-Butylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Styrene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
4-Methyl-2-pentanone	ND	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
tert-Butylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1,1,2-Tetrachloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1,2,2-Tetrachloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Tetrachloroethene (PCE)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
trans-1,2-DCE	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
trans-1,3-Dichloropropene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2,3-Trichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2,4-Trichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1,1-Trichloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1,2-Trichloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Trichloroethene (TCE)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Trichlorofluoromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 10:55:00 AM
Lab ID: 1210811-001
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Vinyl chloride	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%REC	1	10/18/2012 12:09:33 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/18/2012 12:09:33 AM
Surr: Dibromofluoromethane	117	70-130		%REC	1	10/18/2012 12:09:33 AM
Surr: Toluene-d8	94.5	70-130		%REC	1	10/18/2012 12:09:33 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:05:00 AM
Lab ID: 1210811-002
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/18/2012 11:01:44 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/18/2012 11:01:44 AM
Surr: DNOP	102	77.6-140		%REC	1	10/18/2012 11:01:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 12:41:05 AM
Surr: BFB	92.5	84-116		%REC	1	10/23/2012 12:41:05 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:45:32 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
Barium	200	1.0		mg/Kg	10	11/2/2012 3:34:47 PM
Beryllium	0.84	0.30		mg/Kg	2	11/2/2012 10:41:39 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:41:39 AM
Chromium	8.7	0.60		mg/Kg	2	11/2/2012 10:41:39 AM
Cobalt	4.3	0.60		mg/Kg	2	11/2/2012 10:41:39 AM
Iron	12000	500		mg/Kg	500	11/2/2012 3:37:14 PM
Lead	2.7	0.50		mg/Kg	2	11/2/2012 10:41:39 AM
Manganese	300	1.0		mg/Kg	10	11/2/2012 3:34:47 PM
Nickel	7.1	1.0		mg/Kg	2	11/2/2012 10:41:39 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:41:39 AM
Vanadium	16	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
Zinc	14	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:05:00 AM
Lab ID: 1210811-002
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 12:05:27 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 12:05:27 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 12:05:27 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:05:00 AM
Lab ID: 1210811-002
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 12:05:27 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Surr: 2,4,6-Tribromophenol	84.6	21.3-145		%REC	1	10/22/2012 12:05:27 AM
Surr: 2-Fluorobiphenyl	89.0	20-131		%REC	1	10/22/2012 12:05:27 AM
Surr: 2-Fluorophenol	78.4	11.9-130		%REC	1	10/22/2012 12:05:27 AM
Surr: 4-Terphenyl-d14	72.6	25.1-149		%REC	1	10/22/2012 12:05:27 AM
Surr: Nitrobenzene-d5	96.4	25.6-137		%REC	1	10/22/2012 12:05:27 AM
Surr: Phenol-d5	84.1	20.3-132		%REC	1	10/22/2012 12:05:27 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00193	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Toluene	0.00164	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Ethylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Xylenes, Total	ND	0.00154		mg/Kg	1	10/17/2012 3:26:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2,4-Trimethylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,3,5-Trimethylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dichloroethane (EDC)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dibromoethane (EDB)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Naphthalene	ND	0.00154		mg/Kg	1	10/17/2012 3:26:38 PM
1-Methylnaphthalene	ND	0.00308		mg/Kg	1	10/17/2012 3:26:38 PM
2-Methylnaphthalene	ND	0.00308		mg/Kg	1	10/17/2012 3:26:38 PM
Acetone	0.0326	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
Bromobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Bromodichloromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Bromoform	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Bromomethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
2-Butanone	ND	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
Carbon tetrachloride	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Chlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Chloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:05:00 AM
Lab ID: 1210811-002
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Chloromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
2-Chlorotoluene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Carbon disulfide	ND	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
4-Chlorotoluene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
cis-1,2-DCE	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
cis-1,3-Dichloropropene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dibromo-3-chloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Dibromochloromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Dibromomethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,3-Dichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,4-Dichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Dichlorodifluoromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1-Dichloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1-Dichloroethene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dichloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,3-Dichloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
2,2-Dichloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1-Dichloropropene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Hexachlorobutadiene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Isopropylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
4-Isopropyltoluene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Methylene chloride	ND	0.00231		mg/Kg	1	10/17/2012 3:26:38 PM
n-Butylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
2-Hexanone	ND	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
n-Propylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
sec-Butylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Styrene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
4-Methyl-2-pentanone	ND	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
tert-Butylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1,1,2-Tetrachloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1,2,2-Tetrachloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Tetrachloroethene (PCE)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
trans-1,2-DCE	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
trans-1,3-Dichloropropene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2,3-Trichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2,4-Trichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1,1-Trichloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1,2-Trichloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Trichloroethene (TCE)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Trichlorofluoromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-9 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:05:00 AM
Lab ID: 1210811-002
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Vinyl chloride	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	10/17/2012 3:26:38 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/17/2012 3:26:38 PM
Surr: Dibromofluoromethane	98.4	70-130		%REC	1	10/17/2012 3:26:38 PM
Surr: Toluene-d8	94.1	70-130		%REC	1	10/17/2012 3:26:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:20:00 AM
Lab ID: 1210811-003
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	45	9.8		mg/Kg	1	10/19/2012 8:07:52 PM
Motor Oil Range Organics (MRO)	230	49		mg/Kg	1	10/19/2012 8:07:52 PM
Surr: DNOP	105	77.6-140		%REC	1	10/19/2012 8:07:52 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 1:09:44 AM
Surr: BFB	92.9	84-116		%REC	1	10/23/2012 1:09:44 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.20	0.033		mg/kg	1	10/23/2012 5:47:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
Barium	590	2.0		mg/Kg	20	11/2/2012 3:40:07 PM
Beryllium	0.65	0.30		mg/Kg	2	11/2/2012 10:44:04 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:44:04 AM
Chromium	24	0.60		mg/Kg	2	11/2/2012 10:44:04 AM
Cobalt	5.0	0.60		mg/Kg	2	11/2/2012 10:44:04 AM
Iron	14000	500		mg/Kg	500	11/2/2012 3:42:33 PM
Lead	9.1	0.50		mg/Kg	2	11/2/2012 10:44:04 AM
Manganese	560	2.0		mg/Kg	20	11/2/2012 3:40:07 PM
Nickel	14	1.0		mg/Kg	2	11/2/2012 10:44:04 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:44:04 AM
Vanadium	24	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
Zinc	70	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Acenaphthylene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Aniline	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Anthracene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Azobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzoic acid	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:20:00 AM
Lab ID: 1210811-003
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Carbazole	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/22/2012 1:33:01 AM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Chrysene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Dibenzofuran	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/22/2012 1:33:01 AM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/22/2012 1:33:01 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
Fluoranthene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Fluorene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Hexachloroethane	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Isophorone	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2-Methylphenol	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Naphthalene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:20:00 AM
Lab ID: 1210811-003
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
Nitrobenzene	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/22/2012 1:33:01 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
Phenanthrene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Phenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Pyrene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Pyridine	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Surr: 2,4,6-Tribromophenol	89.3	21.3-145		%REC	1	10/22/2012 1:33:01 AM
Surr: 2-Fluorobiphenyl	94.2	20-131		%REC	1	10/22/2012 1:33:01 AM
Surr: 2-Fluorophenol	63.5	11.9-130		%REC	1	10/22/2012 1:33:01 AM
Surr: 4-Terphenyl-d14	97.9	25.1-149		%REC	1	10/22/2012 1:33:01 AM
Surr: Nitrobenzene-d5	80.1	25.6-137		%REC	1	10/22/2012 1:33:01 AM
Surr: Phenol-d5	76.9	20.3-132		%REC	1	10/22/2012 1:33:01 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00176	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Toluene	0.00562	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Ethylbenzene	0.00322	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Xylenes, Total	0.0189	0.00178		mg/Kg	1	10/18/2012 12:47:54 PM
Methyl tert-butyl ether (MTBE)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2,4-Trimethylbenzene	0.00282	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,3,5-Trimethylbenzene	0.00105	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dichloroethane (EDC)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dibromoethane (EDB)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Naphthalene	ND	0.00178		mg/Kg	1	10/18/2012 12:47:54 PM
1-Methylnaphthalene	ND	0.00356		mg/Kg	1	10/18/2012 12:47:54 PM
2-Methylnaphthalene	ND	0.00356		mg/Kg	1	10/18/2012 12:47:54 PM
Acetone	0.146	0.00890		mg/Kg	1	10/18/2012 12:47:54 PM
Bromobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Bromodichloromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Bromoform	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Bromomethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
2-Butanone	ND	0.00890		mg/Kg	1	10/18/2012 12:47:54 PM
Carbon tetrachloride	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Chlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Chloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:20:00 AM
Lab ID: 1210811-003
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Chloromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
2-Chlorotoluene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Carbon disulfide	ND	0.00890		mg/Kg	1	10/18/2012 12:47:54 PM
4-Chlorotoluene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
cis-1,2-DCE	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
cis-1,3-Dichloropropene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dibromo-3-chloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Dibromochloromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Dibromomethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,3-Dichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,4-Dichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Dichlorodifluoromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1-Dichloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1-Dichloroethene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dichloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,3-Dichloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
2,2-Dichloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1-Dichloropropene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Hexachlorobutadiene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Isopropylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
4-Isopropyltoluene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Methylene chloride	ND	0.00267		mg/Kg	1	10/18/2012 12:47:54 PM
n-Butylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
2-Hexanone	ND	0.00890		mg/Kg	1	10/18/2012 12:47:54 PM
n-Propylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
sec-Butylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Styrene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
4-Methyl-2-pentanone	ND	0.00890		mg/Kg	1	10/18/2012 12:47:54 PM
tert-Butylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1,1,2-Tetrachloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1,2,2-Tetrachloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Tetrachloroethene (PCE)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
trans-1,2-DCE	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
trans-1,3-Dichloropropene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2,3-Trichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2,4-Trichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1,1-Trichloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1,2-Trichloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Trichloroethene (TCE)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Trichlorofluoromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:20:00 AM
Lab ID: 1210811-003
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Vinyl chloride	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Surr: 1,2-Dichloroethane-d4	98.9	70-130		%REC	1	10/18/2012 12:47:54 PM
Surr: 4-Bromofluorobenzene	130	70-130	S	%REC	1	10/18/2012 12:47:54 PM
Surr: Dibromofluoromethane	108	70-130		%REC	1	10/18/2012 12:47:54 PM
Surr: Toluene-d8	93.5	70-130		%REC	1	10/18/2012 12:47:54 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:30:00 AM
Lab ID: 1210811-004
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	42	9.8		mg/Kg	1	10/19/2012 8:29:31 PM
Motor Oil Range Organics (MRO)	210	49		mg/Kg	1	10/19/2012 8:29:31 PM
Surr: DNOP	100	77.6-140		%REC	1	10/19/2012 8:29:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 1:38:24 AM
Surr: BFB	93.1	84-116		%REC	1	10/23/2012 1:38:24 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.091	0.033		mg/kg	1	10/23/2012 5:49:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
Barium	580	2.0		mg/Kg	20	11/2/2012 3:45:28 PM
Beryllium	0.54	0.30		mg/Kg	2	11/2/2012 10:46:49 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:46:49 AM
Chromium	15	0.60		mg/Kg	2	11/2/2012 10:46:49 AM
Cobalt	4.2	0.60		mg/Kg	2	11/2/2012 10:46:49 AM
Iron	7400	500		mg/Kg	500	11/2/2012 3:47:54 PM
Lead	3.0	0.50		mg/Kg	2	11/2/2012 10:46:49 AM
Manganese	790	2.0		mg/Kg	20	11/2/2012 3:45:28 PM
Nickel	11	1.0		mg/Kg	2	11/2/2012 10:46:49 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:46:49 AM
Vanadium	22	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
Zinc	26	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Acenaphthylene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Aniline	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Anthracene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Azobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzoic acid	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:30:00 AM
Lab ID: 1210811-004
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Carbazole	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/22/2012 2:02:14 AM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Chrysene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Dibenzofuran	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/22/2012 2:02:14 AM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/22/2012 2:02:14 AM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
Fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Fluorene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Hexachloroethane	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Isophorone	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Methylphenol	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Naphthalene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:30:00 AM
Lab ID: 1210811-004
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
Nitrobenzene	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/22/2012 2:02:14 AM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
Phenanthrene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Phenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Pyrene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Pyridine	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Surr: 2,4,6-Tribromophenol	106	21.3-145		%REC	1	10/22/2012 2:02:14 AM
Surr: 2-Fluorobiphenyl	101	20-131		%REC	1	10/22/2012 2:02:14 AM
Surr: 2-Fluorophenol	90.3	11.9-130		%REC	1	10/22/2012 2:02:14 AM
Surr: 4-Terphenyl-d14	128	25.1-149		%REC	1	10/22/2012 2:02:14 AM
Surr: Nitrobenzene-d5	96.2	25.6-137		%REC	1	10/22/2012 2:02:14 AM
Surr: Phenol-d5	95.3	20.3-132		%REC	1	10/22/2012 2:02:14 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.000934	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Toluene	0.00346	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Ethylbenzene	0.000992	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Xylenes, Total	0.00384	0.00165		mg/Kg	1	10/17/2012 4:28:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2,4-Trimethylbenzene	0.00143	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,3,5-Trimethylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dichloroethane (EDC)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dibromoethane (EDB)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Naphthalene	ND	0.00165		mg/Kg	1	10/17/2012 4:28:16 PM
1-Methylnaphthalene	ND	0.00331		mg/Kg	1	10/17/2012 4:28:16 PM
2-Methylnaphthalene	ND	0.00331		mg/Kg	1	10/17/2012 4:28:16 PM
Acetone	0.0464	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
Bromobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Bromodichloromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Bromoform	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Bromomethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
2-Butanone	ND	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
Carbon tetrachloride	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Chlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Chloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:30:00 AM
Lab ID: 1210811-004
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Chloromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
2-Chlorotoluene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Carbon disulfide	ND	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
4-Chlorotoluene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
cis-1,2-DCE	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
cis-1,3-Dichloropropene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dibromo-3-chloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Dibromochloromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Dibromomethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,3-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,4-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Dichlorodifluoromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1-Dichloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1-Dichloroethene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dichloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,3-Dichloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
2,2-Dichloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1-Dichloropropene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Hexachlorobutadiene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Isopropylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
4-Isopropyltoluene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Methylene chloride	ND	0.00248		mg/Kg	1	10/17/2012 4:28:16 PM
n-Butylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
2-Hexanone	ND	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
n-Propylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
sec-Butylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Styrene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
4-Methyl-2-pentanone	ND	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
tert-Butylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1,1,2-Tetrachloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1,2,2-Tetrachloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Tetrachloroethene (PCE)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
trans-1,2-DCE	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
trans-1,3-Dichloropropene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2,3-Trichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2,4-Trichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1,1-Trichloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1,2-Trichloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Trichloroethene (TCE)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Trichlorofluoromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-10 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 11:30:00 AM
Lab ID: 1210811-004
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Vinyl chloride	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	10/17/2012 4:28:16 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/17/2012 4:28:16 PM
Surr: Dibromofluoromethane	117	70-130		%REC	1	10/17/2012 4:28:16 PM
Surr: Toluene-d8	107	70-130		%REC	1	10/17/2012 4:28:16 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:05:00 PM
Lab ID: 1210811-005
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	87	9.8		mg/Kg	1	10/19/2012 9:02:58 AM
Motor Oil Range Organics (MRO)	86	49		mg/Kg	1	10/19/2012 9:02:58 AM
Surr: DNOP	103	77.6-140		%REC	1	10/19/2012 9:02:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	10/23/2012 2:07:11 AM
Surr: BFB	89.6	84-116		%REC	2	10/23/2012 2:07:11 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.84	0.16		mg/kg	5	10/23/2012 8:00:33 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
Barium	510	2.0		mg/Kg	20	11/2/2012 3:50:46 PM
Beryllium	0.77	0.30		mg/Kg	2	11/2/2012 10:49:22 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:49:22 AM
Chromium	15	0.60		mg/Kg	2	11/2/2012 10:49:22 AM
Cobalt	5.4	0.60		mg/Kg	2	11/2/2012 10:49:22 AM
Iron	14000	500		mg/Kg	500	11/2/2012 4:02:06 PM
Lead	3.5	0.50		mg/Kg	2	11/2/2012 10:49:22 AM
Manganese	620	2.0		mg/Kg	20	11/2/2012 3:50:46 PM
Nickel	8.8	1.0		mg/Kg	2	11/2/2012 10:49:22 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:49:22 AM
Vanadium	25	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
Zinc	39	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:05:00 PM
Lab ID: 1210811-005
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 2:31:21 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 2:31:21 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 2:31:21 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:05:00 PM
Lab ID: 1210811-005
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 2:31:21 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Surr: 2,4,6-Tribromophenol	97.9	21.3-145		%REC	1	10/22/2012 2:31:21 AM
Surr: 2-Fluorobiphenyl	90.9	20-131		%REC	1	10/22/2012 2:31:21 AM
Surr: 2-Fluorophenol	81.9	11.9-130		%REC	1	10/22/2012 2:31:21 AM
Surr: 4-Terphenyl-d14	91.0	25.1-149		%REC	1	10/22/2012 2:31:21 AM
Surr: Nitrobenzene-d5	95.4	25.6-137		%REC	1	10/22/2012 2:31:21 AM
Surr: Phenol-d5	84.2	20.3-132		%REC	1	10/22/2012 2:31:21 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00207	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Toluene	0.00414	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Ethylbenzene	0.00933	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Xylenes, Total	0.0565	0.00195		mg/Kg	1	10/17/2012 4:59:03 PM
Methyl tert-butyl ether (MTBE)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2,4-Trimethylbenzene	0.00219	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,3,5-Trimethylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dichloroethane (EDC)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dibromoethane (EDB)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Naphthalene	ND	0.00195		mg/Kg	1	10/17/2012 4:59:03 PM
1-Methylnaphthalene	ND	0.00390		mg/Kg	1	10/17/2012 4:59:03 PM
2-Methylnaphthalene	ND	0.00390		mg/Kg	1	10/17/2012 4:59:03 PM
Acetone	0.329	0.00976	E	mg/Kg	1	10/17/2012 4:59:03 PM
Bromobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Bromodichloromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Bromoform	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Bromomethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
2-Butanone	0.0102	0.00976		mg/Kg	1	10/17/2012 4:59:03 PM
Carbon tetrachloride	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Chlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Chloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:05:00 PM
Lab ID: 1210811-005
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Chloromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
2-Chlorotoluene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Carbon disulfide	ND	0.00976		mg/Kg	1	10/17/2012 4:59:03 PM
4-Chlorotoluene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
cis-1,2-DCE	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
cis-1,3-Dichloropropene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dibromo-3-chloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Dibromochloromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Dibromomethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,3-Dichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,4-Dichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Dichlorodifluoromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1-Dichloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1-Dichloroethene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dichloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,3-Dichloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
2,2-Dichloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1-Dichloropropene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Hexachlorobutadiene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Isopropylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
4-Isopropyltoluene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Methylene chloride	ND	0.00293		mg/Kg	1	10/17/2012 4:59:03 PM
n-Butylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
2-Hexanone	ND	0.00976		mg/Kg	1	10/17/2012 4:59:03 PM
n-Propylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
sec-Butylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Styrene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
4-Methyl-2-pentanone	ND	0.00976		mg/Kg	1	10/17/2012 4:59:03 PM
tert-Butylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1,1,2-Tetrachloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1,2,2-Tetrachloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Tetrachloroethene (PCE)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
trans-1,2-DCE	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
trans-1,3-Dichloropropene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2,3-Trichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2,4-Trichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1,1-Trichloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1,2-Trichloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Trichloroethene (TCE)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Trichlorofluoromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:05:00 PM
Lab ID: 1210811-005
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Vinyl chloride	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	10/17/2012 4:59:03 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/17/2012 4:59:03 PM
Surr: Dibromofluoromethane	113	70-130		%REC	1	10/17/2012 4:59:03 PM
Surr: Toluene-d8	99.1	70-130		%REC	1	10/17/2012 4:59:03 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:20:00 PM
Lab ID: 1210811-006
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	120	10		mg/Kg	1	10/19/2012 9:24:38 AM
Motor Oil Range Organics (MRO)	120	51		mg/Kg	1	10/19/2012 9:24:38 AM
Surr: DNOP	103	77.6-140		%REC	1	10/19/2012 9:24:38 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	10/23/2012 2:35:56 AM
Surr: BFB	89.2	84-116		%REC	2	10/23/2012 2:35:56 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.19	0.033		mg/kg	1	10/23/2012 5:52:47 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
Barium	590	2.0		mg/Kg	20	11/2/2012 4:05:01 PM
Beryllium	0.61	0.30		mg/Kg	2	11/2/2012 11:00:53 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:00:53 AM
Chromium	12	0.60		mg/Kg	2	11/2/2012 11:00:53 AM
Cobalt	4.0	0.60		mg/Kg	2	11/2/2012 11:00:53 AM
Iron	7400	500		mg/Kg	500	11/2/2012 4:09:11 PM
Lead	1.4	0.50		mg/Kg	2	11/2/2012 11:00:53 AM
Manganese	400	2.0		mg/Kg	20	11/2/2012 4:05:01 PM
Nickel	7.1	1.0		mg/Kg	2	11/2/2012 11:00:53 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:00:53 AM
Vanadium	18	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
Zinc	44	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:20:00 PM
Lab ID: 1210811-006
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 3:00:24 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 3:00:24 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 3:00:24 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:20:00 PM
Lab ID: 1210811-006
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 3:00:24 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Surr: 2,4,6-Tribromophenol	89.5	21.3-145		%REC	1	10/22/2012 3:00:24 AM
Surr: 2-Fluorobiphenyl	87.7	20-131		%REC	1	10/22/2012 3:00:24 AM
Surr: 2-Fluorophenol	82.9	11.9-130		%REC	1	10/22/2012 3:00:24 AM
Surr: 4-Terphenyl-d14	72.3	25.1-149		%REC	1	10/22/2012 3:00:24 AM
Surr: Nitrobenzene-d5	95.3	25.6-137		%REC	1	10/22/2012 3:00:24 AM
Surr: Phenol-d5	79.9	20.3-132		%REC	1	10/22/2012 3:00:24 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00131	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Toluene	0.00804	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Ethylbenzene	0.00229	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Xylenes, Total	0.00902	0.00153		mg/Kg	1	10/17/2012 5:29:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2,4-Trimethylbenzene	0.00449	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,3,5-Trimethylbenzene	0.00165	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dichloroethane (EDC)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dibromoethane (EDB)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Naphthalene	ND	0.00153		mg/Kg	1	10/17/2012 5:29:46 PM
1-Methylnaphthalene	ND	0.00307		mg/Kg	1	10/17/2012 5:29:46 PM
2-Methylnaphthalene	ND	0.00307		mg/Kg	1	10/17/2012 5:29:46 PM
Acetone	0.0686	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
Bromobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Bromodichloromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Bromoform	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Bromomethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
2-Butanone	ND	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
Carbon tetrachloride	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Chlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Chloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:20:00 PM
Lab ID: 1210811-006
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Chloromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
2-Chlorotoluene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Carbon disulfide	ND	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
4-Chlorotoluene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
cis-1,2-DCE	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
cis-1,3-Dichloropropene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dibromo-3-chloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Dibromochloromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Dibromomethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,3-Dichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,4-Dichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Dichlorodifluoromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1-Dichloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1-Dichloroethene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dichloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,3-Dichloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
2,2-Dichloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1-Dichloropropene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Hexachlorobutadiene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Isopropylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
4-Isopropyltoluene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Methylene chloride	ND	0.00230		mg/Kg	1	10/17/2012 5:29:46 PM
n-Butylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
2-Hexanone	ND	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
n-Propylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
sec-Butylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Styrene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
4-Methyl-2-pentanone	ND	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
tert-Butylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1,1,2-Tetrachloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1,2,2-Tetrachloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Tetrachloroethene (PCE)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
trans-1,2-DCE	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
trans-1,3-Dichloropropene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2,3-Trichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2,4-Trichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1,1-Trichloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1,2-Trichloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Trichloroethene (TCE)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Trichlorofluoromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-11 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 12:20:00 PM
Lab ID: 1210811-006
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Vinyl chloride	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	10/17/2012 5:29:46 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	1	10/17/2012 5:29:46 PM
Surr: Dibromofluoromethane	115	70-130		%REC	1	10/17/2012 5:29:46 PM
Surr: Toluene-d8	111	70-130		%REC	1	10/17/2012 5:29:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 2:45:00 PM
Lab ID: 1210811-007
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	200	10		mg/Kg	1	10/19/2012 9:46:08 AM
Motor Oil Range Organics (MRO)	150	51		mg/Kg	1	10/19/2012 9:46:08 AM
Surr: DNOP	105	77.6-140		%REC	1	10/19/2012 9:46:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	10/23/2012 3:04:40 AM
Surr: BFB	92.8	84-116		%REC	2	10/23/2012 3:04:40 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.16	0.033		mg/kg	1	10/23/2012 5:54:35 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
Barium	400	1.0		mg/Kg	10	11/2/2012 4:12:04 PM
Beryllium	0.95	0.30		mg/Kg	2	11/2/2012 11:03:20 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:03:20 AM
Chromium	15	0.60		mg/Kg	2	11/2/2012 11:03:20 AM
Cobalt	5.4	0.60		mg/Kg	2	11/2/2012 11:03:20 AM
Iron	15000	500		mg/Kg	500	11/2/2012 4:14:29 PM
Lead	1.6	0.50		mg/Kg	2	11/2/2012 11:03:20 AM
Manganese	390	1.0		mg/Kg	10	11/2/2012 4:12:04 PM
Nickel	9.9	1.0		mg/Kg	2	11/2/2012 11:03:20 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:03:20 AM
Vanadium	24	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
Zinc	61	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 2:45:00 PM
Lab ID: 1210811-007
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 3:29:24 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
Di-n-octyl phthalate	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 3:29:24 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 3:29:24 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 2:45:00 PM
Lab ID: 1210811-007
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
4-Nitroaniline	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 3:29:24 AM
Pentachlorophenol	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Surr: 2,4,6-Tribromophenol	86.0	21.3-145		%REC	1	10/22/2012 3:29:24 AM
Surr: 2-Fluorobiphenyl	83.6	20-131		%REC	1	10/22/2012 3:29:24 AM
Surr: 2-Fluorophenol	79.7	11.9-130		%REC	1	10/22/2012 3:29:24 AM
Surr: 4-Terphenyl-d14	73.3	25.1-149		%REC	1	10/22/2012 3:29:24 AM
Surr: Nitrobenzene-d5	94.3	25.6-137		%REC	1	10/22/2012 3:29:24 AM
Surr: Phenol-d5	78.0	20.3-132		%REC	1	10/22/2012 3:29:24 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00232	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Toluene	0.00554	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Ethylbenzene	0.0233	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Xylenes, Total	0.186	0.00178		mg/Kg	1	10/17/2012 6:00:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2,4-Trimethylbenzene	0.00394	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,3,5-Trimethylbenzene	0.00161	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dichloroethane (EDC)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dibromoethane (EDB)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Naphthalene	ND	0.00178		mg/Kg	1	10/17/2012 6:00:30 PM
1-Methylnaphthalene	ND	0.00357		mg/Kg	1	10/17/2012 6:00:30 PM
2-Methylnaphthalene	ND	0.00357		mg/Kg	1	10/17/2012 6:00:30 PM
Acetone	3.23	0.00892	E	mg/Kg	1	10/17/2012 6:00:30 PM
Bromobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Bromodichloromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Bromoform	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Bromomethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
2-Butanone	0.0132	0.00892		mg/Kg	1	10/17/2012 6:00:30 PM
Carbon tetrachloride	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Chlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Chloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 2:45:00 PM
Lab ID: 1210811-007
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Chloromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
2-Chlorotoluene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Carbon disulfide	ND	0.00892		mg/Kg	1	10/17/2012 6:00:30 PM
4-Chlorotoluene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
cis-1,2-DCE	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
cis-1,3-Dichloropropene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dibromo-3-chloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Dibromochloromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Dibromomethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,3-Dichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,4-Dichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Dichlorodifluoromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1-Dichloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1-Dichloroethene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dichloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,3-Dichloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
2,2-Dichloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1-Dichloropropene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Hexachlorobutadiene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Isopropylbenzene	0.00144	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
4-Isopropyltoluene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Methylene chloride	ND	0.00268		mg/Kg	1	10/17/2012 6:00:30 PM
n-Butylbenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
2-Hexanone	ND	0.00892		mg/Kg	1	10/17/2012 6:00:30 PM
n-Propylbenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
sec-Butylbenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Styrene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
4-Methyl-2-pentanone	ND	0.00892		mg/Kg	1	10/17/2012 6:00:30 PM
tert-Butylbenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1,1,2-Tetrachloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1,2,2-Tetrachloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Tetrachloroethene (PCE)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
trans-1,2-DCE	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
trans-1,3-Dichloropropene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2,3-Trichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2,4-Trichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1,1-Trichloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1,2-Trichloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Trichloroethene (TCE)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Trichlorofluoromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 2:45:00 PM
Lab ID: 1210811-007
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Vinyl chloride	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	1	10/17/2012 6:00:30 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	10/17/2012 6:00:30 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/17/2012 6:00:30 PM
Surr: Toluene-d8	93.0	70-130		%REC	1	10/17/2012 6:00:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:00:00 PM
Lab ID: 1210811-008
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	190	9.6		mg/Kg	1	10/19/2012 10:07:43 AM
Motor Oil Range Organics (MRO)	190	48		mg/Kg	1	10/19/2012 10:07:43 AM
Surr: DNOP	111	77.6-140		%REC	1	10/19/2012 10:07:43 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	10/23/2012 3:33:26 AM
Surr: BFB	91.2	84-116		%REC	2	10/23/2012 3:33:26 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.12	0.033		mg/kg	1	10/23/2012 5:56:22 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
Barium	440	1.0		mg/Kg	10	11/2/2012 4:17:23 PM
Beryllium	0.76	0.30		mg/Kg	2	11/2/2012 11:05:49 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:05:49 AM
Chromium	14	0.60		mg/Kg	2	11/2/2012 11:05:49 AM
Cobalt	4.9	0.60		mg/Kg	2	11/2/2012 11:05:49 AM
Iron	13000	500		mg/Kg	500	11/2/2012 4:19:48 PM
Lead	1.6	0.50		mg/Kg	2	11/2/2012 11:05:49 AM
Manganese	460	1.0		mg/Kg	10	11/2/2012 4:17:23 PM
Nickel	8.0	1.0		mg/Kg	2	11/2/2012 11:05:49 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:05:49 AM
Vanadium	24	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
Zinc	40	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:00:00 PM
Lab ID: 1210811-008
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 3:58:25 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 3:58:25 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 3:58:25 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:00:00 PM
Lab ID: 1210811-008
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 3:58:25 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Surr: 2,4,6-Tribromophenol	101	21.3-145		%REC	1	10/22/2012 3:58:25 AM
Surr: 2-Fluorobiphenyl	91.8	20-131		%REC	1	10/22/2012 3:58:25 AM
Surr: 2-Fluorophenol	81.6	11.9-130		%REC	1	10/22/2012 3:58:25 AM
Surr: 4-Terphenyl-d14	82.5	25.1-149		%REC	1	10/22/2012 3:58:25 AM
Surr: Nitrobenzene-d5	99.5	25.6-137		%REC	1	10/22/2012 3:58:25 AM
Surr: Phenol-d5	85.2	20.3-132		%REC	1	10/22/2012 3:58:25 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00191	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Toluene	0.00470	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Ethylbenzene	0.00131	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Xylenes, Total	0.00699	0.00146		mg/Kg	1	10/17/2012 7:02:10 PM
Methyl tert-butyl ether (MTBE)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2,4-Trimethylbenzene	0.00382	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,3,5-Trimethylbenzene	0.00149	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dichloroethane (EDC)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dibromoethane (EDB)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Naphthalene	ND	0.00146		mg/Kg	1	10/17/2012 7:02:10 PM
1-Methylnaphthalene	ND	0.00292		mg/Kg	1	10/17/2012 7:02:10 PM
2-Methylnaphthalene	ND	0.00292		mg/Kg	1	10/17/2012 7:02:10 PM
Acetone	0.0917	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
Bromobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Bromodichloromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Bromoform	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Bromomethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
2-Butanone	ND	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
Carbon tetrachloride	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Chlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Chloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:00:00 PM
Lab ID: 1210811-008
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Chloromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
2-Chlorotoluene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Carbon disulfide	ND	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
4-Chlorotoluene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
cis-1,2-DCE	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
cis-1,3-Dichloropropene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dibromo-3-chloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Dibromochloromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Dibromomethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,3-Dichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,4-Dichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Dichlorodifluoromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1-Dichloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1-Dichloroethene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dichloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,3-Dichloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
2,2-Dichloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1-Dichloropropene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Hexachlorobutadiene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Isopropylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
4-Isopropyltoluene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Methylene chloride	ND	0.00219		mg/Kg	1	10/17/2012 7:02:10 PM
n-Butylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
2-Hexanone	ND	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
n-Propylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
sec-Butylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Styrene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
4-Methyl-2-pentanone	ND	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
tert-Butylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1,1,2-Tetrachloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1,2,2-Tetrachloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Tetrachloroethene (PCE)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
trans-1,2-DCE	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
trans-1,3-Dichloropropene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2,3-Trichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2,4-Trichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1,1-Trichloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1,2-Trichloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Trichloroethene (TCE)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Trichlorofluoromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-12 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:00:00 PM
Lab ID: 1210811-008
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Vinyl chloride	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	10/17/2012 7:02:10 PM
Surr: 4-Bromofluorobenzene	120	70-130		%REC	1	10/17/2012 7:02:10 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/17/2012 7:02:10 PM
Surr: Toluene-d8	88.3	70-130		%REC	1	10/17/2012 7:02:10 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:30:00 PM
Lab ID: 1210811-009
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	58	9.8		mg/Kg	1	10/19/2012 8:19:39 AM
Motor Oil Range Organics (MRO)	94	49		mg/Kg	1	10/19/2012 8:19:39 AM
Surr: DNOP	102	77.6-140		%REC	1	10/19/2012 8:19:39 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 4:02:08 AM
Surr: BFB	91.2	84-116		%REC	1	10/23/2012 4:02:08 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.050	0.033		mg/kg	1	10/23/2012 6:01:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
Barium	530	2.0		mg/Kg	20	11/2/2012 4:25:06 PM
Beryllium	1.0	0.30		mg/Kg	2	11/2/2012 11:08:19 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:08:19 AM
Chromium	11	0.60		mg/Kg	2	11/2/2012 11:08:19 AM
Cobalt	5.4	0.60		mg/Kg	2	11/2/2012 11:08:19 AM
Iron	14000	500		mg/Kg	500	11/2/2012 4:27:31 PM
Lead	1.9	0.50		mg/Kg	2	11/2/2012 11:08:19 AM
Manganese	300	1.0		mg/Kg	10	11/2/2012 4:22:41 PM
Nickel	8.9	1.0		mg/Kg	2	11/2/2012 11:08:19 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:08:19 AM
Vanadium	20	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
Zinc	33	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:30:00 PM
Lab ID: 1210811-009
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	1.5	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 4:27:35 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 4:27:35 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 4:27:35 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:30:00 PM
Lab ID: 1210811-009
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 4:27:35 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Surr: 2,4,6-Tribromophenol	93.5	21.3-145		%REC	1	10/22/2012 4:27:35 AM
Surr: 2-Fluorobiphenyl	91.4	20-131		%REC	1	10/22/2012 4:27:35 AM
Surr: 2-Fluorophenol	86.9	11.9-130		%REC	1	10/22/2012 4:27:35 AM
Surr: 4-Terphenyl-d14	92.8	25.1-149		%REC	1	10/22/2012 4:27:35 AM
Surr: Nitrobenzene-d5	102	25.6-137		%REC	1	10/22/2012 4:27:35 AM
Surr: Phenol-d5	88.1	20.3-132		%REC	1	10/22/2012 4:27:35 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00171	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Toluene	0.00574	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Ethylbenzene	0.00165	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Xylenes, Total	0.00542	0.00149		mg/Kg	1	10/17/2012 7:32:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2,4-Trimethylbenzene	0.00194	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,3,5-Trimethylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dichloroethane (EDC)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dibromoethane (EDB)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Naphthalene	ND	0.00149		mg/Kg	1	10/17/2012 7:32:57 PM
1-Methylnaphthalene	ND	0.00298		mg/Kg	1	10/17/2012 7:32:57 PM
2-Methylnaphthalene	ND	0.00298		mg/Kg	1	10/17/2012 7:32:57 PM
Acetone	0.0471	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
Bromobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Bromodichloromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Bromoform	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Bromomethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
2-Butanone	ND	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
Carbon tetrachloride	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Chlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Chloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:30:00 PM
Lab ID: 1210811-009
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Chloromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
2-Chlorotoluene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Carbon disulfide	ND	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
4-Chlorotoluene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
cis-1,2-DCE	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
cis-1,3-Dichloropropene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dibromo-3-chloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Dibromochloromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Dibromomethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,3-Dichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,4-Dichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Dichlorodifluoromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1-Dichloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1-Dichloroethene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dichloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,3-Dichloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
2,2-Dichloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1-Dichloropropene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Hexachlorobutadiene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Isopropylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
4-Isopropyltoluene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Methylene chloride	ND	0.00223		mg/Kg	1	10/17/2012 7:32:57 PM
n-Butylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
2-Hexanone	ND	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
n-Propylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
sec-Butylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Styrene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
4-Methyl-2-pentanone	ND	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
tert-Butylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1,1,2-Tetrachloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1,2,2-Tetrachloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Tetrachloroethene (PCE)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
trans-1,2-DCE	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
trans-1,3-Dichloropropene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2,3-Trichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2,4-Trichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1,1-Trichloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1,2-Trichloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Trichloroethene (TCE)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Trichlorofluoromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:30:00 PM
Lab ID: 1210811-009
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Vinyl chloride	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/17/2012 7:32:57 PM
Surr: 4-Bromofluorobenzene	85.9	70-130		%REC	1	10/17/2012 7:32:57 PM
Surr: Dibromofluoromethane	117	70-130		%REC	1	10/17/2012 7:32:57 PM
Surr: Toluene-d8	106	70-130		%REC	1	10/17/2012 7:32:57 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-010
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/18/2012 11:42:59 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/18/2012 11:42:59 AM
Surr: DNOP	95.9	77.6-140		%REC	1	10/18/2012 11:42:59 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 4:59:28 AM
Surr: BFB	91.9	84-116		%REC	1	10/23/2012 4:59:28 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:03:36 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	13		mg/Kg	5	11/2/2012 4:43:30 PM
Arsenic	ND	13		mg/Kg	5	11/2/2012 4:43:30 PM
Barium	360	2.0		mg/Kg	20	11/2/2012 4:45:54 PM
Beryllium	0.75	0.75		mg/Kg	5	11/2/2012 4:43:30 PM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 4:43:30 PM
Chromium	11	1.5		mg/Kg	5	11/2/2012 4:43:30 PM
Cobalt	4.4	1.5		mg/Kg	5	11/2/2012 4:43:30 PM
Iron	13000	500		mg/Kg	500	11/2/2012 4:48:20 PM
Lead	4.1	1.3		mg/Kg	5	11/2/2012 4:43:30 PM
Manganese	430	2.0		mg/Kg	20	11/2/2012 4:45:54 PM
Nickel	7.6	2.5		mg/Kg	5	11/2/2012 4:43:30 PM
Selenium	ND	13		mg/Kg	5	11/2/2012 4:43:30 PM
Silver	ND	1.3		mg/Kg	5	11/2/2012 4:43:30 PM
Vanadium	19	13		mg/Kg	5	11/2/2012 4:43:30 PM
Zinc	16	13		mg/Kg	5	11/2/2012 4:43:30 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-010
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 4:56:48 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 4:56:48 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 4:56:48 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-010
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 4:56:48 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Surr: 2,4,6-Tribromophenol	88.5	21.3-145		%REC	1	10/22/2012 4:56:48 AM
Surr: 2-Fluorobiphenyl	90.7	20-131		%REC	1	10/22/2012 4:56:48 AM
Surr: 2-Fluorophenol	82.6	11.9-130		%REC	1	10/22/2012 4:56:48 AM
Surr: 4-Terphenyl-d14	74.6	25.1-149		%REC	1	10/22/2012 4:56:48 AM
Surr: Nitrobenzene-d5	97.6	25.6-137		%REC	1	10/22/2012 4:56:48 AM
Surr: Phenol-d5	89.2	20.3-132		%REC	1	10/22/2012 4:56:48 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Toluene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Ethylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Xylenes, Total	ND	0.00179		mg/Kg	1	10/17/2012 8:03:39 PM
Methyl tert-butyl ether (MTBE)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2,4-Trimethylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,3,5-Trimethylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dichloroethane (EDC)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dibromoethane (EDB)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Naphthalene	ND	0.00179		mg/Kg	1	10/17/2012 8:03:39 PM
1-Methylnaphthalene	ND	0.00357		mg/Kg	1	10/17/2012 8:03:39 PM
2-Methylnaphthalene	ND	0.00357		mg/Kg	1	10/17/2012 8:03:39 PM
Acetone	0.0202	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
Bromobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Bromodichloromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Bromoform	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Bromomethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
2-Butanone	ND	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
Carbon tetrachloride	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Chlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Chloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-010
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Chloromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
2-Chlorotoluene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Carbon disulfide	ND	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
4-Chlorotoluene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
cis-1,2-DCE	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
cis-1,3-Dichloropropene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dibromo-3-chloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Dibromochloromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Dibromomethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,3-Dichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,4-Dichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Dichlorodifluoromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1-Dichloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1-Dichloroethene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dichloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,3-Dichloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
2,2-Dichloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1-Dichloropropene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Hexachlorobutadiene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Isopropylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
4-Isopropyltoluene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Methylene chloride	ND	0.00268		mg/Kg	1	10/17/2012 8:03:39 PM
n-Butylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
2-Hexanone	ND	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
n-Propylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
sec-Butylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Styrene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
4-Methyl-2-pentanone	ND	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
tert-Butylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1,1,2-Tetrachloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1,2,2-Tetrachloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Tetrachloroethene (PCE)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
trans-1,2-DCE	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
trans-1,3-Dichloropropene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2,3-Trichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2,4-Trichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1,1-Trichloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1,2-Trichloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Trichloroethene (TCE)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Trichlorofluoromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-010
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Vinyl chloride	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%REC	1	10/17/2012 8:03:39 PM
Surr: 4-Bromofluorobenzene	84.0	70-130		%REC	1	10/17/2012 8:03:39 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/17/2012 8:03:39 PM
Surr: Toluene-d8	104	70-130		%REC	1	10/17/2012 8:03:39 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2') DUP
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-011 **Matrix:** SOIL **Received Date:** 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/18/2012 12:07:39 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/18/2012 12:07:39 PM
Surr: DNOP	99.2	77.6-140		%REC	1	10/18/2012 12:07:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 3:56:01 PM
Surr: BFB	88.0	84-116		%REC	1	10/24/2012 3:56:01 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:05:24 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
Barium	240	1.0		mg/Kg	10	11/2/2012 4:51:10 PM
Beryllium	0.81	0.30		mg/Kg	2	11/2/2012 11:15:00 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:15:00 AM
Chromium	11	0.60		mg/Kg	2	11/2/2012 11:15:00 AM
Cobalt	5.0	0.60		mg/Kg	2	11/2/2012 11:15:00 AM
Iron	15000	500		mg/Kg	500	11/2/2012 4:53:33 PM
Lead	1.0	0.50		mg/Kg	2	11/2/2012 11:15:00 AM
Manganese	350	1.0		mg/Kg	10	11/2/2012 4:51:10 PM
Nickel	8.3	1.0		mg/Kg	2	11/2/2012 11:15:00 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:15:00 AM
Vanadium	28	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
Zinc	21	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM

Qualifiers:

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2') DUP
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-011
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 5:25:56 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 5:25:56 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 5:25:56 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 5:25:56 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Surr: 2,4,6-Tribromophenol	87.0	21.3-145		%REC	1	10/22/2012 5:25:56 AM
Surr: 2-Fluorobiphenyl	89.9	20-131		%REC	1	10/22/2012 5:25:56 AM
Surr: 2-Fluorophenol	83.0	11.9-130		%REC	1	10/22/2012 5:25:56 AM
Surr: 4-Terphenyl-d14	82.7	25.1-149		%REC	1	10/22/2012 5:25:56 AM
Surr: Nitrobenzene-d5	98.6	25.6-137		%REC	1	10/22/2012 5:25:56 AM
Surr: Phenol-d5	86.9	20.3-132		%REC	1	10/22/2012 5:25:56 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Toluene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Ethylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Xylenes, Total	ND	0.00171		mg/Kg	1	10/17/2012 8:34:21 PM
Methyl tert-butyl ether (MTBE)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2,4-Trimethylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,3,5-Trimethylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dichloroethane (EDC)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dibromoethane (EDB)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Naphthalene	ND	0.00171		mg/Kg	1	10/17/2012 8:34:21 PM
1-Methylnaphthalene	ND	0.00342		mg/Kg	1	10/17/2012 8:34:21 PM
2-Methylnaphthalene	ND	0.00342		mg/Kg	1	10/17/2012 8:34:21 PM
Acetone	0.0139	0.00854		mg/Kg	1	10/17/2012 8:34:21 PM
Bromobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Bromodichloromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Bromoform	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Bromomethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
2-Butanone	ND	0.00854		mg/Kg	1	10/17/2012 8:34:21 PM
Carbon tetrachloride	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Chlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Chloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2') DUP
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-011 **Matrix:** SOIL **Received Date:** 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Chloromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
2-Chlorotoluene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Carbon disulfide	ND	0.00854		mg/Kg	1	10/17/2012 8:34:21 PM
4-Chlorotoluene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
cis-1,2-DCE	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
cis-1,3-Dichloropropene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dibromo-3-chloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Dibromochloromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Dibromomethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,3-Dichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,4-Dichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Dichlorodifluoromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1-Dichloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1-Dichloroethene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dichloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,3-Dichloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
2,2-Dichloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1-Dichloropropene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Hexachlorobutadiene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Isopropylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
4-Isopropyltoluene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Methylene chloride	ND	0.00256		mg/Kg	1	10/17/2012 8:34:21 PM
n-Butylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
2-Hexanone	ND	0.00854		mg/Kg	1	10/17/2012 8:34:21 PM
n-Propylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
sec-Butylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Styrene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
4-Methyl-2-pentanone	ND	0.00854		mg/Kg	1	10/17/2012 8:34:21 PM
tert-Butylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1,1,2-Tetrachloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1,2,2-Tetrachloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Tetrachloroethene (PCE)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
trans-1,2-DCE	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
trans-1,3-Dichloropropene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2,3-Trichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2,4-Trichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1,1-Trichloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1,2-Trichloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Trichloroethene (TCE)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Trichlorofluoromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-14 (1.5-2') DUP
Project: SWMU NO.1
Collection Date: 10/15/2012 3:55:00 PM
Lab ID: 1210811-011
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Vinyl chloride	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%REC	1	10/17/2012 8:34:21 PM
Surr: 4-Bromofluorobenzene	88.9	70-130		%REC	1	10/17/2012 8:34:21 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/17/2012 8:34:21 PM
Surr: Toluene-d8	80.8	70-130		%REC	1	10/17/2012 8:34:21 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:20:00 PM
Lab ID: 1210811-012
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/18/2012 11:23:15 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/18/2012 11:23:15 AM
Surr: DNOP	97.5	77.6-140		%REC	1	10/18/2012 11:23:15 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 4:24:48 PM
Surr: BFB	87.7	84-116		%REC	1	10/24/2012 4:24:48 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:07:10 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	13		mg/Kg	5	11/2/2012 4:56:27 PM
Arsenic	ND	13		mg/Kg	5	11/2/2012 4:56:27 PM
Barium	360	2.0		mg/Kg	20	11/2/2012 4:58:52 PM
Beryllium	0.75	0.75		mg/Kg	5	11/2/2012 4:56:27 PM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 4:56:27 PM
Chromium	10	1.5		mg/Kg	5	11/2/2012 4:56:27 PM
Cobalt	4.4	1.5		mg/Kg	5	11/2/2012 4:56:27 PM
Iron	13000	500		mg/Kg	500	11/2/2012 5:01:17 PM
Lead	3.1	1.3		mg/Kg	5	11/2/2012 4:56:27 PM
Manganese	350	2.0		mg/Kg	20	11/2/2012 4:58:52 PM
Nickel	7.6	2.5		mg/Kg	5	11/2/2012 4:56:27 PM
Selenium	ND	13		mg/Kg	5	11/2/2012 4:56:27 PM
Silver	ND	1.3		mg/Kg	5	11/2/2012 4:56:27 PM
Vanadium	19	13		mg/Kg	5	11/2/2012 4:56:27 PM
Zinc	18	13		mg/Kg	5	11/2/2012 4:56:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:20:00 PM
Lab ID: 1210811-012
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 5:54:58 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 5:54:58 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 5:54:58 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:20:00 PM
Lab ID: 1210811-012
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 5:54:58 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Surr: 2,4,6-Tribromophenol	82.7	21.3-145		%REC	1	10/22/2012 5:54:58 AM
Surr: 2-Fluorobiphenyl	93.6	20-131		%REC	1	10/22/2012 5:54:58 AM
Surr: 2-Fluorophenol	74.2	11.9-130		%REC	1	10/22/2012 5:54:58 AM
Surr: 4-Terphenyl-d14	81.0	25.1-149		%REC	1	10/22/2012 5:54:58 AM
Surr: Nitrobenzene-d5	96.8	25.6-137		%REC	1	10/22/2012 5:54:58 AM
Surr: Phenol-d5	79.4	20.3-132		%REC	1	10/22/2012 5:54:58 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00192	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Toluene	0.00151	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Ethylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Xylenes, Total	0.00254	0.00146		mg/Kg	1	10/17/2012 9:05:05 PM
Methyl tert-butyl ether (MTBE)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2,4-Trimethylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,3,5-Trimethylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dichloroethane (EDC)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dibromoethane (EDB)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Naphthalene	ND	0.00146		mg/Kg	1	10/17/2012 9:05:05 PM
1-Methylnaphthalene	ND	0.00292		mg/Kg	1	10/17/2012 9:05:05 PM
2-Methylnaphthalene	ND	0.00292		mg/Kg	1	10/17/2012 9:05:05 PM
Acetone	0.0754	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
Bromobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Bromodichloromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Bromoform	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Bromomethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
2-Butanone	ND	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
Carbon tetrachloride	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Chlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Chloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:20:00 PM
Lab ID: 1210811-012
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Chloromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
2-Chlorotoluene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Carbon disulfide	ND	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
4-Chlorotoluene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
cis-1,2-DCE	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
cis-1,3-Dichloropropene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dibromo-3-chloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Dibromochloromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Dibromomethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,3-Dichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,4-Dichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Dichlorodifluoromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1-Dichloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1-Dichloroethene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dichloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,3-Dichloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
2,2-Dichloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1-Dichloropropene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Hexachlorobutadiene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Isopropylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
4-Isopropyltoluene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Methylene chloride	ND	0.00219		mg/Kg	1	10/17/2012 9:05:05 PM
n-Butylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
2-Hexanone	ND	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
n-Propylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
sec-Butylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Styrene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
4-Methyl-2-pentanone	ND	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
tert-Butylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1,1,2-Tetrachloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1,2,2-Tetrachloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Tetrachloroethene (PCE)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
trans-1,2-DCE	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
trans-1,3-Dichloropropene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2,3-Trichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2,4-Trichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1,1-Trichloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1,2-Trichloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Trichloroethene (TCE)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Trichlorofluoromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:20:00 PM
Lab ID: 1210811-012
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Vinyl chloride	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/17/2012 9:05:05 PM
Surr: 4-Bromofluorobenzene	90.2	70-130		%REC	1	10/17/2012 9:05:05 PM
Surr: Dibromofluoromethane	112	70-130		%REC	1	10/17/2012 9:05:05 PM
Surr: Toluene-d8	86.6	70-130		%REC	1	10/17/2012 9:05:05 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:30:00 PM
Lab ID: 1210811-013
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/18/2012 12:32:30 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/18/2012 12:32:30 PM
Surr: DNOP	94.3	77.6-140		%REC	1	10/18/2012 12:32:30 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 4:53:34 PM
Surr: BFB	87.1	84-116		%REC	1	10/24/2012 4:53:34 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:08:57 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
Barium	240	1.0		mg/Kg	10	11/2/2012 5:04:08 PM
Beryllium	0.79	0.30		mg/Kg	2	11/2/2012 11:19:59 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:19:59 AM
Chromium	11	0.60		mg/Kg	2	11/2/2012 11:19:59 AM
Cobalt	5.3	0.60		mg/Kg	2	11/2/2012 11:19:59 AM
Iron	12000	500		mg/Kg	500	11/6/2012 11:53:57 AM
Lead	1.4	0.50		mg/Kg	2	11/2/2012 11:19:59 AM
Manganese	400	1.0		mg/Kg	10	11/2/2012 5:04:08 PM
Nickel	8.3	1.0		mg/Kg	2	11/2/2012 11:19:59 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:19:59 AM
Vanadium	22	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
Zinc	21	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:30:00 PM
Lab ID: 1210811-013
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 6:23:55 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 6:23:55 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 6:23:55 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:30:00 PM
Lab ID: 1210811-013
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 6:23:55 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Surr: 2,4,6-Tribromophenol	97.1	21.3-145		%REC	1	10/22/2012 6:23:55 AM
Surr: 2-Fluorobiphenyl	93.0	20-131		%REC	1	10/22/2012 6:23:55 AM
Surr: 2-Fluorophenol	81.8	11.9-130		%REC	1	10/22/2012 6:23:55 AM
Surr: 4-Terphenyl-d14	80.3	25.1-149		%REC	1	10/22/2012 6:23:55 AM
Surr: Nitrobenzene-d5	97.2	25.6-137		%REC	1	10/22/2012 6:23:55 AM
Surr: Phenol-d5	84.7	20.3-132		%REC	1	10/22/2012 6:23:55 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Toluene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Ethylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Xylenes, Total	ND	0.00144		mg/Kg	1	10/17/2012 9:35:46 PM
Methyl tert-butyl ether (MTBE)	0.00147	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2,4-Trimethylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,3,5-Trimethylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dichloroethane (EDC)	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dibromoethane (EDB)	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Naphthalene	ND	0.00144		mg/Kg	1	10/17/2012 9:35:46 PM
1-Methylnaphthalene	ND	0.00288		mg/Kg	1	10/17/2012 9:35:46 PM
2-Methylnaphthalene	ND	0.00288		mg/Kg	1	10/17/2012 9:35:46 PM
Acetone	0.0328	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
Bromobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Bromodichloromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Bromoform	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Bromomethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
2-Butanone	ND	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
Carbon tetrachloride	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Chlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Chloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:30:00 PM
Lab ID: 1210811-013
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Chloromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
2-Chlorotoluene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Carbon disulfide	ND	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
4-Chlorotoluene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
cis-1,2-DCE	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
cis-1,3-Dichloropropene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dibromo-3-chloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Dibromochloromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Dibromomethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,3-Dichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,4-Dichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Dichlorodifluoromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1-Dichloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1-Dichloroethene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dichloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,3-Dichloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
2,2-Dichloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1-Dichloropropene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Hexachlorobutadiene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Isopropylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
4-Isopropyltoluene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Methylene chloride	ND	0.00216		mg/Kg	1	10/17/2012 9:35:46 PM
n-Butylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
2-Hexanone	ND	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
n-Propylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
sec-Butylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Styrene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
4-Methyl-2-pentanone	ND	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
tert-Butylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1,1,2-Tetrachloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1,2,2-Tetrachloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Tetrachloroethene (PCE)	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
trans-1,2-DCE	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
trans-1,3-Dichloropropene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2,3-Trichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2,4-Trichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1,1-Trichloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1,2-Trichloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Trichloroethene (TCE)	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Trichlorofluoromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-15 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:30:00 PM
Lab ID: 1210811-013
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Vinyl chloride	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%REC	1	10/17/2012 9:35:46 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	10/17/2012 9:35:46 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/17/2012 9:35:46 PM
Surr: Toluene-d8	94.9	70-130		%REC	1	10/17/2012 9:35:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:55:00 PM
Lab ID: 1210811-014
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/18/2012 2:11:51 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/18/2012 2:11:51 PM
Surr: DNOP	94.8	77.6-140		%REC	1	10/18/2012 2:11:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 5:22:13 PM
Surr: BFB	87.6	84-116		%REC	1	10/24/2012 5:22:13 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:10:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
Barium	640	2.0		mg/Kg	20	11/2/2012 5:19:54 PM
Beryllium	0.46	0.30		mg/Kg	2	11/2/2012 11:22:28 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:22:28 AM
Chromium	3.9	0.60		mg/Kg	2	11/2/2012 11:22:28 AM
Cobalt	3.0	0.60		mg/Kg	2	11/2/2012 11:22:28 AM
Iron	3400	500		mg/Kg	500	11/6/2012 11:56:51 AM
Lead	ND	0.50		mg/Kg	2	11/2/2012 11:22:28 AM
Manganese	330	2.0		mg/Kg	20	11/2/2012 5:19:54 PM
Nickel	4.6	1.0		mg/Kg	2	11/2/2012 11:22:28 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:22:28 AM
Vanadium	14	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
Zinc	14	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:55:00 PM
Lab ID: 1210811-014
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 6:52:45 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 6:52:45 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 6:52:45 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:55:00 PM
Lab ID: 1210811-014
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 6:52:45 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Surr: 2,4,6-Tribromophenol	66.1	21.3-145		%REC	1	10/22/2012 6:52:45 AM
Surr: 2-Fluorobiphenyl	74.1	20-131		%REC	1	10/22/2012 6:52:45 AM
Surr: 2-Fluorophenol	58.3	11.9-130		%REC	1	10/22/2012 6:52:45 AM
Surr: 4-Terphenyl-d14	69.2	25.1-149		%REC	1	10/22/2012 6:52:45 AM
Surr: Nitrobenzene-d5	74.4	25.6-137		%REC	1	10/22/2012 6:52:45 AM
Surr: Phenol-d5	65.1	20.3-132		%REC	1	10/22/2012 6:52:45 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00134	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Toluene	0.00712	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Ethylbenzene	0.00282	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Xylenes, Total	0.0130	0.00157		mg/Kg	1	10/17/2012 10:06:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2,4-Trimethylbenzene	0.00423	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,3,5-Trimethylbenzene	0.00176	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dichloroethane (EDC)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dibromoethane (EDB)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Naphthalene	ND	0.00157		mg/Kg	1	10/17/2012 10:06:30 PM
1-Methylnaphthalene	ND	0.00314		mg/Kg	1	10/17/2012 10:06:30 PM
2-Methylnaphthalene	ND	0.00314		mg/Kg	1	10/17/2012 10:06:30 PM
Acetone	0.0845	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
Bromobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Bromodichloromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Bromoform	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Bromomethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
2-Butanone	ND	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
Carbon tetrachloride	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Chlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Chloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:55:00 PM
Lab ID: 1210811-014
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Chloromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
2-Chlorotoluene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Carbon disulfide	ND	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
4-Chlorotoluene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
cis-1,2-DCE	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
cis-1,3-Dichloropropene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dibromo-3-chloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Dibromochloromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Dibromomethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,3-Dichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,4-Dichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Dichlorodifluoromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1-Dichloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1-Dichloroethene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dichloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,3-Dichloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
2,2-Dichloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1-Dichloropropene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Hexachlorobutadiene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Isopropylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
4-Isopropyltoluene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Methylene chloride	ND	0.00236		mg/Kg	1	10/17/2012 10:06:30 PM
n-Butylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
2-Hexanone	ND	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
n-Propylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
sec-Butylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Styrene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
4-Methyl-2-pentanone	ND	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
tert-Butylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1,1,2-Tetrachloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1,2,2-Tetrachloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Tetrachloroethene (PCE)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
trans-1,2-DCE	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
trans-1,3-Dichloropropene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2,3-Trichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2,4-Trichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1,1-Trichloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1,2-Trichloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Trichloroethene (TCE)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Trichlorofluoromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 4:55:00 PM
Lab ID: 1210811-014
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Vinyl chloride	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	10/17/2012 10:06:30 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	1	10/17/2012 10:06:30 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/17/2012 10:06:30 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	10/17/2012 10:06:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:05:00 PM
Lab ID: 1210811-015
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 8:41:24 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2012 8:41:24 AM
Surr: DNOP	101	77.6-140		%REC	1	10/19/2012 8:41:24 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 5:50:52 PM
Surr: BFB	89.9	84-116		%REC	1	10/24/2012 5:50:52 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.033	0.033		mg/kg	1	10/23/2012 6:23:10 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	11/6/2012 11:59:37 AM
Arsenic	ND	12		mg/Kg	5	11/6/2012 11:59:37 AM
Barium	290	2.0		mg/Kg	20	11/2/2012 5:27:35 PM
Beryllium	ND	0.75		mg/Kg	5	11/2/2012 5:25:09 PM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 5:25:09 PM
Chromium	9.9	1.5		mg/Kg	5	11/2/2012 5:25:09 PM
Cobalt	4.2	1.5		mg/Kg	5	11/2/2012 5:25:09 PM
Iron	12000	500		mg/Kg	500	11/6/2012 12:02:39 PM
Lead	4.2	1.2		mg/Kg	5	11/2/2012 5:25:09 PM
Manganese	790	2.0		mg/Kg	20	11/2/2012 5:27:35 PM
Nickel	7.2	2.5		mg/Kg	5	11/2/2012 5:25:09 PM
Selenium	ND	12		mg/Kg	5	11/2/2012 5:25:09 PM
Silver	ND	1.2		mg/Kg	5	11/2/2012 5:25:09 PM
Vanadium	18	12		mg/Kg	5	11/2/2012 5:25:09 PM
Zinc	17	12		mg/Kg	5	11/6/2012 11:59:37 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:05:00 PM
Lab ID: 1210811-015
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 7:21:36 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 7:21:36 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 7:21:36 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:05:00 PM
Lab ID: 1210811-015
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 7:21:36 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Surr: 2,4,6-Tribromophenol	84.9	21.3-145		%REC	1	10/22/2012 7:21:36 AM
Surr: 2-Fluorobiphenyl	93.5	20-131		%REC	1	10/22/2012 7:21:36 AM
Surr: 2-Fluorophenol	89.6	11.9-130		%REC	1	10/22/2012 7:21:36 AM
Surr: 4-Terphenyl-d14	85.1	25.1-149		%REC	1	10/22/2012 7:21:36 AM
Surr: Nitrobenzene-d5	101	25.6-137		%REC	1	10/22/2012 7:21:36 AM
Surr: Phenol-d5	89.6	20.3-132		%REC	1	10/22/2012 7:21:36 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00166	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Toluene	0.00157	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Ethylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Xylenes, Total	ND	0.00149		mg/Kg	1	10/17/2012 10:37:20 PM
Methyl tert-butyl ether (MTBE)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2,4-Trimethylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,3,5-Trimethylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dichloroethane (EDC)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dibromoethane (EDB)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Naphthalene	ND	0.00149		mg/Kg	1	10/17/2012 10:37:20 PM
1-Methylnaphthalene	ND	0.00297		mg/Kg	1	10/17/2012 10:37:20 PM
2-Methylnaphthalene	ND	0.00297		mg/Kg	1	10/17/2012 10:37:20 PM
Acetone	0.0282	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
Bromobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Bromodichloromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Bromoform	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Bromomethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
2-Butanone	ND	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
Carbon tetrachloride	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Chlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Chloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:05:00 PM
Lab ID: 1210811-015
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Chloromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
2-Chlorotoluene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Carbon disulfide	ND	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
4-Chlorotoluene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
cis-1,2-DCE	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
cis-1,3-Dichloropropene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dibromo-3-chloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Dibromochloromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Dibromomethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,3-Dichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,4-Dichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Dichlorodifluoromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1-Dichloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1-Dichloroethene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dichloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,3-Dichloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
2,2-Dichloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1-Dichloropropene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Hexachlorobutadiene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Isopropylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
4-Isopropyltoluene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Methylene chloride	ND	0.00223		mg/Kg	1	10/17/2012 10:37:20 PM
n-Butylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
2-Hexanone	ND	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
n-Propylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
sec-Butylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Styrene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
4-Methyl-2-pentanone	ND	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
tert-Butylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1,1,2-Tetrachloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1,2,2-Tetrachloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Tetrachloroethene (PCE)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
trans-1,2-DCE	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
trans-1,3-Dichloropropene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2,3-Trichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2,4-Trichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1,1-Trichloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1,2-Trichloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Trichloroethene (TCE)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Trichlorofluoromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-16 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:05:00 PM
Lab ID: 1210811-015
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Vinyl chloride	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%REC	1	10/17/2012 10:37:20 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	10/17/2012 10:37:20 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/17/2012 10:37:20 PM
Surr: Toluene-d8	97.5	70-130		%REC	1	10/17/2012 10:37:20 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:30:00 PM
Lab ID: 1210811-016
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/18/2012 2:37:02 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/18/2012 2:37:02 PM
Surr: DNOP	93.7	77.6-140		%REC	1	10/18/2012 2:37:02 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 6:19:44 PM
Surr: BFB	90.2	84-116		%REC	1	10/24/2012 6:19:44 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:24:57 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.0		mg/Kg	2	11/27/2012 10:08:12 AM
Arsenic	ND	5.0		mg/Kg	2	11/27/2012 10:08:12 AM
Barium	500	2.0		mg/Kg	20	11/2/2012 5:40:07 PM
Beryllium	0.67	0.30		mg/Kg	2	11/2/2012 11:37:29 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:37:29 AM
Chromium	6.6	0.60		mg/Kg	2	11/2/2012 11:37:29 AM
Cobalt	4.1	0.60		mg/Kg	2	11/2/2012 11:37:29 AM
Iron	8200	500		mg/Kg	500	11/6/2012 2:17:39 PM
Lead	0.82	0.50		mg/Kg	2	11/2/2012 11:37:29 AM
Manganese	360	2.0		mg/Kg	20	11/2/2012 5:40:07 PM
Nickel	6.4	1.0		mg/Kg	2	11/2/2012 11:37:29 AM
Selenium	ND	5.0		mg/Kg	2	11/27/2012 10:08:12 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:37:29 AM
Vanadium	19	5.0		mg/Kg	2	11/2/2012 11:37:29 AM
Zinc	15	5.0		mg/Kg	2	11/2/2012 11:37:29 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:30:00 PM
Lab ID: 1210811-016
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 7:50:26 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 7:50:26 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 7:50:26 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:30:00 PM
Lab ID: 1210811-016
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 7:50:26 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Surr: 2,4,6-Tribromophenol	91.6	21.3-145		%REC	1	10/22/2012 7:50:26 AM
Surr: 2-Fluorobiphenyl	96.7	20-131		%REC	1	10/22/2012 7:50:26 AM
Surr: 2-Fluorophenol	87.5	11.9-130		%REC	1	10/22/2012 7:50:26 AM
Surr: 4-Terphenyl-d14	87.9	25.1-149		%REC	1	10/22/2012 7:50:26 AM
Surr: Nitrobenzene-d5	98.8	25.6-137		%REC	1	10/22/2012 7:50:26 AM
Surr: Phenol-d5	88.9	20.3-132		%REC	1	10/22/2012 7:50:26 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00129	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Toluene	0.00708	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Ethylbenzene	0.00362	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Xylenes, Total	0.0234	0.00150		mg/Kg	1	10/17/2012 11:08:05 PM
Methyl tert-butyl ether (MTBE)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2,4-Trimethylbenzene	0.00424	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,3,5-Trimethylbenzene	0.00164	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dichloroethane (EDC)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dibromoethane (EDB)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Naphthalene	ND	0.00150		mg/Kg	1	10/17/2012 11:08:05 PM
1-Methylnaphthalene	ND	0.00301		mg/Kg	1	10/17/2012 11:08:05 PM
2-Methylnaphthalene	ND	0.00301		mg/Kg	1	10/17/2012 11:08:05 PM
Acetone	0.377	0.00752	E	mg/Kg	1	10/17/2012 11:08:05 PM
Bromobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Bromodichloromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Bromoform	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Bromomethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
2-Butanone	ND	0.00752		mg/Kg	1	10/17/2012 11:08:05 PM
Carbon tetrachloride	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Chlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Chloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:30:00 PM
Lab ID: 1210811-016
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Chloromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
2-Chlorotoluene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Carbon disulfide	ND	0.00752		mg/Kg	1	10/17/2012 11:08:05 PM
4-Chlorotoluene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
cis-1,2-DCE	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
cis-1,3-Dichloropropene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dibromo-3-chloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Dibromochloromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Dibromomethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,3-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,4-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Dichlorodifluoromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1-Dichloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1-Dichloroethene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dichloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,3-Dichloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
2,2-Dichloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1-Dichloropropene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Hexachlorobutadiene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Isopropylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
4-Isopropyltoluene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Methylene chloride	ND	0.00226		mg/Kg	1	10/17/2012 11:08:05 PM
n-Butylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
2-Hexanone	ND	0.00752		mg/Kg	1	10/17/2012 11:08:05 PM
n-Propylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
sec-Butylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Styrene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
4-Methyl-2-pentanone	ND	0.00752		mg/Kg	1	10/17/2012 11:08:05 PM
tert-Butylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1,1,2-Tetrachloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1,2,2-Tetrachloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Tetrachloroethene (PCE)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
trans-1,2-DCE	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
trans-1,3-Dichloropropene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2,3-Trichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2,4-Trichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1,1-Trichloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1,2-Trichloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Trichloroethene (TCE)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Trichlorofluoromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:30:00 PM
Lab ID: 1210811-016
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Vinyl chloride	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Surr: 1,2-Dichloroethane-d4	88.7	70-130		%REC	1	10/17/2012 11:08:05 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%REC	1	10/17/2012 11:08:05 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/17/2012 11:08:05 PM
Surr: Toluene-d8	91.5	70-130		%REC	1	10/17/2012 11:08:05 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.1
Lab ID: 1210811-017 **Matrix:** SOIL

Client Sample ID: SWMU 1-17 (1-1.5')
Collection Date: 10/15/2012 5:40:00 PM
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/18/2012 3:02:26 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/18/2012 3:02:26 PM
Surr: DNOP	96.0	77.6-140		%REC	1	10/18/2012 3:02:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 6:48:35 PM
Surr: BFB	88.8	84-116		%REC	1	10/24/2012 6:48:35 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:26:46 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	11/6/2012 12:24:33 PM
Arsenic	ND	5.0		mg/Kg	2	11/6/2012 2:00:22 PM
Barium	310	2.0		mg/Kg	20	11/2/2012 6:05:26 PM
Beryllium	0.78	0.30		mg/Kg	2	11/2/2012 6:02:58 PM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 6:02:58 PM
Chromium	8.8	0.60		mg/Kg	2	11/2/2012 6:02:58 PM
Cobalt	4.1	0.60		mg/Kg	2	11/2/2012 6:02:58 PM
Iron	11000	500		mg/Kg	500	11/6/2012 2:20:27 PM
Lead	3.5	0.50		mg/Kg	2	11/2/2012 6:02:58 PM
Manganese	340	2.0		mg/Kg	20	11/2/2012 6:05:26 PM
Nickel	7.2	1.0		mg/Kg	2	11/2/2012 6:02:58 PM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 6:02:58 PM
Silver	ND	0.50		mg/Kg	2	11/13/2012 5:30:19 AM
Vanadium	13	5.0		mg/Kg	2	11/2/2012 6:02:58 PM
Zinc	15	5.0		mg/Kg	2	11/6/2012 12:24:33 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzoic acid	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:40:00 PM
Lab ID: 1210811-017
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 8:19:31 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
Di-n-octyl phthalate	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 8:19:31 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 8:19:31 AM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Isophorone	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2-Methylphenol	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:40:00 PM
Lab ID: 1210811-017
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
Nitrobenzene	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 8:19:31 AM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Pyridine	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Surr: 2,4,6-Tribromophenol	84.8	21.3-145		%REC	1	10/22/2012 8:19:31 AM
Surr: 2-Fluorobiphenyl	83.4	20-131		%REC	1	10/22/2012 8:19:31 AM
Surr: 2-Fluorophenol	82.3	11.9-130		%REC	1	10/22/2012 8:19:31 AM
Surr: 4-Terphenyl-d14	85.4	25.1-149		%REC	1	10/22/2012 8:19:31 AM
Surr: Nitrobenzene-d5	93.3	25.6-137		%REC	1	10/22/2012 8:19:31 AM
Surr: Phenol-d5	80.4	20.3-132		%REC	1	10/22/2012 8:19:31 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00269	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Toluene	0.00185	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Ethylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Xylenes, Total	ND	0.00167		mg/Kg	1	10/17/2012 11:38:49 PM
Methyl tert-butyl ether (MTBE)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2,4-Trimethylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,3,5-Trimethylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dichloroethane (EDC)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dibromoethane (EDB)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Naphthalene	ND	0.00167		mg/Kg	1	10/17/2012 11:38:49 PM
1-Methylnaphthalene	ND	0.00334		mg/Kg	1	10/17/2012 11:38:49 PM
2-Methylnaphthalene	ND	0.00334		mg/Kg	1	10/17/2012 11:38:49 PM
Acetone	0.0615	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
Bromobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Bromodichloromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Bromoform	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Bromomethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
2-Butanone	0.0107	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
Carbon tetrachloride	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Chlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Chloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:40:00 PM
Lab ID: 1210811-017
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Chloromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
2-Chlorotoluene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Carbon disulfide	ND	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
4-Chlorotoluene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
cis-1,2-DCE	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
cis-1,3-Dichloropropene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dibromo-3-chloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Dibromochloromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Dibromomethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,3-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,4-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Dichlorodifluoromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1-Dichloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1-Dichloroethene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dichloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,3-Dichloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
2,2-Dichloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1-Dichloropropene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Hexachlorobutadiene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Isopropylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
4-Isopropyltoluene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Methylene chloride	ND	0.00250		mg/Kg	1	10/17/2012 11:38:49 PM
n-Butylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
2-Hexanone	ND	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
n-Propylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
sec-Butylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Styrene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
4-Methyl-2-pentanone	ND	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
tert-Butylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1,1,2-Tetrachloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1,2,2-Tetrachloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Tetrachloroethene (PCE)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
trans-1,2-DCE	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
trans-1,3-Dichloropropene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2,3-Trichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2,4-Trichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1,1-Trichloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1,2-Trichloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Trichloroethene (TCE)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Trichlorofluoromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-17 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/15/2012 5:40:00 PM
Lab ID: 1210811-017
Matrix: SOIL
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Vinyl chloride	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%REC	1	10/17/2012 11:38:49 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	10/17/2012 11:38:49 PM
Surr: Dibromofluoromethane	107	70-130		%REC	1	10/17/2012 11:38:49 PM
Surr: Toluene-d8	82.3	70-130		%REC	1	10/17/2012 11:38:49 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101512
Project: SWMU NO.1
Collection Date: 10/15/2012 6:00:00 PM
Lab ID: 1210811-018
Matrix: AQUEOUS
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/17/2012 5:29:17 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/17/2012 5:29:17 PM
Surr: DNOP	110	79.5-166		%REC	1	10/17/2012 5:29:17 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	ND	0.10		mg/L	1	10/17/2012 11:42:11 AM
Chloride	ND	0.50		mg/L	1	10/17/2012 11:42:11 AM
Sulfate	ND	0.50		mg/L	1	10/17/2012 11:42:11 AM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	10/17/2012 9:49:33 PM
Beryllium	ND	0.0020		mg/L	1	10/17/2012 9:49:33 PM
Cadmium	ND	0.0020		mg/L	1	10/17/2012 9:49:33 PM
Chromium	ND	0.0060		mg/L	1	10/17/2012 9:49:33 PM
Cobalt	0.16	0.0060		mg/L	1	10/17/2012 9:49:33 PM
Iron	0.16	0.020		mg/L	1	10/18/2012 1:47:35 PM
Manganese	ND	0.0020		mg/L	1	10/17/2012 9:49:33 PM
Nickel	ND	0.010		mg/L	1	10/17/2012 9:49:33 PM
Silver	ND	0.0050		mg/L	1	10/17/2012 9:49:33 PM
Vanadium	ND	0.050		mg/L	1	10/17/2012 9:49:33 PM
Zinc	ND	0.010		mg/L	1	10/17/2012 9:49:33 PM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/30/2012 4:04:21 PM
Arsenic	ND	0.0010		mg/L	1	10/30/2012 4:04:21 PM
Lead	ND	0.0010		mg/L	1	10/30/2012 4:04:21 PM
Selenium	ND	0.0010		mg/L	1	10/30/2012 4:04:21 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/30/2012 6:51:42 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Acenaphthylene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Aniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Anthracene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Azobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benz(a)anthracene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzoic acid	ND	20		µg/L	1	10/22/2012 7:47:47 PM
Benzyl alcohol	ND	10		µg/L	1	10/22/2012 7:47:47 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101512
Project: SWMU NO.1
Collection Date: 10/15/2012 6:00:00 PM
Lab ID: 1210811-018
Matrix: AQUEOUS
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Carbazole	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Chloroaniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Chlorophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Chrysene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/22/2012 7:47:47 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Dibenzofuran	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Diethyl phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Dimethyl phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/22/2012 7:47:47 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/22/2012 7:47:47 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/22/2012 7:47:47 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Fluoranthene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Fluorene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Hexachlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Hexachloroethane	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Isophorone	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Methylphenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
3+4-Methylphenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/22/2012 7:47:47 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101512
Project: SWMU NO.1
Collection Date: 10/15/2012 6:00:00 PM
Lab ID: 1210811-018
Matrix: AQUEOUS
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/22/2012 7:47:47 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Naphthalene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Nitroaniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
3-Nitroaniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Nitroaniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Nitrobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Nitrophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Nitrophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Pentachlorophenol	ND	20		µg/L	1	10/22/2012 7:47:47 PM
Phenanthrene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Phenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Pyrene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Pyridine	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Surr: 2,4,6-Tribromophenol	79.8	42.9-124		%REC	1	10/22/2012 7:47:47 PM
Surr: 2-Fluorobiphenyl	73.5	40-108		%REC	1	10/22/2012 7:47:47 PM
Surr: 2-Fluorophenol	54.3	23.6-94.8		%REC	1	10/22/2012 7:47:47 PM
Surr: 4-Terphenyl-d14	70.5	41.9-103		%REC	1	10/22/2012 7:47:47 PM
Surr: Nitrobenzene-d5	79.5	42.6-114		%REC	1	10/22/2012 7:47:47 PM
Surr: Phenol-d5	39.4	20.3-74.7		%REC	1	10/22/2012 7:47:47 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Toluene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Ethylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Naphthalene	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/20/2012 5:00:19 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/20/2012 5:00:19 AM
Acetone	ND	10		µg/L	1	10/20/2012 5:00:19 AM
Bromobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Bromoform	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Bromomethane	ND	3.0		µg/L	1	10/20/2012 5:00:19 AM
2-Butanone	ND	10		µg/L	1	10/20/2012 5:00:19 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101512
Project: SWMU NO.1
Collection Date: 10/15/2012 6:00:00 PM
Lab ID: 1210811-018
Matrix: AQUEOUS
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Carbon disulfide	ND	10		µg/L	1	10/20/2012 5:00:19 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Chlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Chloroethane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
Chloroform	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Chloromethane	ND	3.0		µg/L	1	10/20/2012 5:00:19 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Dibromomethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
2-Hexanone	ND	10		µg/L	1	10/20/2012 5:00:19 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/20/2012 5:00:19 AM
Methylene Chloride	ND	3.0		µg/L	1	10/20/2012 5:00:19 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/20/2012 5:00:19 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Styrene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Analytical Report
Lab Order **1210811**
Date Reported: **11/28/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101512
Project: SWMU NO.1
Collection Date: 10/15/2012 6:00:00 PM
Lab ID: 1210811-018
Matrix: AQUEOUS
Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
Vinyl chloride	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Xylenes, Total	ND	1.5		µg/L	1	10/20/2012 5:00:19 AM
Surr: 1,2-Dichloroethane-d4	98.4	70-130		%REC	1	10/20/2012 5:00:19 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/20/2012 5:00:19 AM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/20/2012 5:00:19 AM
Surr: Toluene-d8	97.7	70-130		%REC	1	10/20/2012 5:00:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 11:46:01 PM
Surr: BFB	91.0	70-130		%REC	1	10/20/2012 11:46:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121018035
Project Name: 1210811

Analytical Results Report

Sample Number 121018035-001 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-001D / SWMU 1-9 (0-0.5) **Sampling Time** 10:55 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.41	mg/Kg	0.26	10/29/2012	CRW	EPA 335.4	
%moisture	7.9	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-002 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-002D / SWMU 1-9 (1.5-2) **Sampling Time** 11:05 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.285	10/29/2012	CRW	EPA 335.4	
%moisture	14.4	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-003 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-003D / SWMU 1-10 (0-0.5) **Sampling Time** 11:20 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.84	mg/Kg	0.241	10/29/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-004 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-004D / SWMU 1-10 (1.5-2) **Sampling Time** 11:30 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.399	mg/Kg	0.256	10/29/2012	CRW	EPA 335.4	
%moisture	4.2	Percent		10/30/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C585
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121018035
Project Name: 1210811

Analytical Results Report

Sample Number 121018035-005 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-005D / SWMU 1-11 (0-0.5) **Sampling Time** 12:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.716	mg/Kg	0.261	10/29/2012	CRW	EPA 335.4	
%moisture	5.1	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-006 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-006D / SWMU 1-11 (1.5-2) **Sampling Time** 12:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.68	mg/Kg	0.267	10/29/2012	CRW	EPA 335.4	
%moisture	5.5	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-007 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-007D / SWMU 1-12 (0-0.5) **Sampling Time** 2:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.25	10/29/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-008 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-008D / SWMU 1-12 (0.5-1) **Sampling Time** 3:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.15	mg/Kg	0.245	10/29/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/30/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121018035
Project Name: 1210811

Analytical Results Report

Sample Number 121018035-009 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-009D / SWMU 1-14 (0-0.5) **Sampling Time** 3:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.268	10/29/2012	CRW	EPA 335.4	
%moisture	7.5	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-010 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-010D / SWMU 1-14 (1.5-2) **Sampling Time** 3:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.287	10/29/2012	CRW	EPA 335.4	
%moisture	12.7	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-011 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-011D / SWMU 1-14 (1.5-2) **Sampling Time** 3:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.284	10/29/2012	CRW	EPA 335.4	
%moisture	12.3	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-012 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-012D / SWMU 1-15 (0-0.5) **Sampling Time** 4:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.276	10/29/2012	CRW	EPA 335.4	
%moisture	9.4	Percent		10/30/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	121018035
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1210811
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	121018035-013	**Sampling Date**	10/15/2012	**Date/Time Received**	10/18/2012 12:20 PM
Client Sample ID	1210811-013D / SWMU 1-15 (1.5-2)	**Sampling Time**	4:30 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.281	10/29/2012	CRW	EPA 335.4	
%moisture	12.1	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-014	**Sampling Date**	10/15/2012	**Date/Time Received**	10/18/2012 12:20 PM
Client Sample ID	1210811-014D / SWMU 1-16 (0-0.5)	**Sampling Time**	4:55 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.254	10/29/2012	CRW	EPA 335.4	
%moisture	2.3	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-015	**Sampling Date**	10/15/2012	**Date/Time Received**	10/18/2012 12:20 PM
Client Sample ID	1210811-015D / SWMU 1-16 (1.5-2)	**Sampling Time**	5:05 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.285	10/29/2012	CRW	EPA 335.4	
%moisture	12.7	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-016	**Sampling Date**	10/15/2012	**Date/Time Received**	10/18/2012 12:20 PM
Client Sample ID	1210811-016D / SWMU 1-17 (0-0.5)	**Sampling Time**	5:30 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.244	10/29/2012	CRW	EPA 335.4	
%moisture	3.4	Percent		10/30/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121018035
Project Name: 1210811

Analytical Results Report

Sample Number 121018035-017 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-017D / SWMU 1-17 (1-1.5) **Sampling Time** 5:40 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.273	10/29/2012	CRW	EPA 335.4	
%moisture	11.9	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-018 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-018F / EB101512 **Sampling Time** 6:00 PM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/29/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181711** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	101	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	98.9	85	115			
Cobalt	0.49	0.0060	0.5000	0	97.1	85	115			
Manganese	0.49	0.0020	0.5000	0	98.1	85	115			
Nickel	0.48	0.010	0.5000	0	95.9	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.52	0.050	0.5000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	98.4	85	115			

Sample ID **1210572-018AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181754** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	101	70	130			
Chromium	0.47	0.0060	0.5000	0	95.0	70	130			
Nickel	0.45	0.010	0.5000	0.001290	90.7	70	130			
Zinc	0.46	0.010	0.5000	0	92.7	70	130			

Sample ID **1210572-018AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181755** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210572-018AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6311** RunNo: **6311**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181755** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	99.7	70	130	1.02	20	
Chromium	0.47	0.0060	0.5000	0	93.9	70	130	1.11	20	
Nickel	0.46	0.010	0.5000	0.001290	92.0	70	130	1.48	20	
Zinc	0.46	0.010	0.5000	0	91.7	70	130	1.09	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182483** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182484** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.1	85	115			

Sample ID **1210513-001AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182578** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	100	70	130			

Sample ID **1210513-001AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6342** RunNo: **6342**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182579** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.8	70	130	1.41	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1209858-006AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6580** RunNo: **6580**
Prep Date: Analysis Date: **10/30/2012** SeqNo: **189993** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.027	0.0010	0.02500	0.0009490	105	70	130			

Sample ID **1209A21-003AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6580** RunNo: **6580**
Prep Date: Analysis Date: **10/30/2012** SeqNo: **190002** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.027	0.0010	0.02500	0.0003493	107	70	130			

Sample ID **1210832-001EMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6580** RunNo: **6580**
Prep Date: Analysis Date: **10/30/2012** SeqNo: **190029** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	70	130			
Arsenic	0.026	0.0010	0.02500	0	105	70	130			
Selenium	0.026	0.0010	0.02500	0	103	70	130			

Sample ID **1210841-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6580** RunNo: **6580**
Prep Date: Analysis Date: **10/30/2012** SeqNo: **190033** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.16	0.0050	0.1250	0.03863	96.0	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6580** RunNo: **6580**
Prep Date: Analysis Date: **10/30/2012** SeqNo: **190071** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	85	115			
Arsenic	0.026	0.0010	0.02500	0	103	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6580** RunNo: **6580**
Prep Date: Analysis Date: **10/30/2012** SeqNo: **190073** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.026	0.0010	0.02500	0	106	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Metals**		
Client ID: **PBW**	Batch ID: **R6580**	RunNo: **6580**		
Prep Date:	Analysis Date: **10/30/2012**	SeqNo: **190075**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Metals**		
Client ID: **PBW**	Batch ID: **R6580**	RunNo: **6580**		
Prep Date:	Analysis Date: **10/30/2012**	SeqNo: **190077**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4585** SampType: **mblk** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **4585** RunNo: **6596**
Prep Date: **10/30/2012** Analysis Date: **10/30/2012** SeqNo: **190499** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-4585** SampType: **lcs** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **4585** RunNo: **6596**
Prep Date: **10/30/2012** Analysis Date: **10/30/2012** SeqNo: **190500** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.5	80	120			

Sample ID **1210C89-001AMS** SampType: **ms** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4585** RunNo: **6596**
Prep Date: **10/30/2012** Analysis Date: **10/30/2012** SeqNo: **190525** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0098	0.00040	0.01000	0	97.9	75	125			

Sample ID **1210C89-001AMSD** SampType: **msd** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4585** RunNo: **6596**
Prep Date: **10/30/2012** Analysis Date: **10/30/2012** SeqNo: **190526** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0096	0.00040	0.01000	0	95.8	75	125	2.25	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6314** RunNo: **6314**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181811** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6314** RunNo: **6314**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181812** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	92.2	90	110			
Chloride	5.0	0.50	5.000	0	99.4	90	110			
Sulfate	9.9	0.50	10.00	0	99.4	90	110			

Sample ID **1210811-018CMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB101512** Batch ID: **R6314** RunNo: **6314**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181814** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	91.9	76.6	110			
Chloride	5.0	0.50	5.000	0	99.6	87.8	111			
Sulfate	9.8	0.50	10.00	0	97.6	84.6	122			

Sample ID **1210811-018CMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB101512** Batch ID: **R6314** RunNo: **6314**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181815** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.45	0.10	0.5000	0	90.8	76.6	110	1.21	20	
Chloride	4.8	0.50	5.000	0	95.9	87.8	111	3.74	20	
Sulfate	9.4	0.50	10.00	0	94.1	84.6	122	3.75	20	

Sample ID **1210825-001BMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6314** RunNo: **6314**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181818** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6296	88.2	76.6	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210825-001BMSD**	SampType:	**MSD**	TestCode:	**EPA Method 300.0: Anions**
Client ID:	**BatchQC**	Batch ID:	**R6314**	RunNo:	**6314**
Prep Date:		Analysis Date:	**10/17/2012**	SeqNo:	**181819** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6296	88.1	76.6	110	0.0510	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4369** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4369** RunNo: **6325**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182210** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	77.6	140			

Sample ID **LCS-4369** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4369** RunNo: **6325**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182211** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.4	52.6	130			
Surr: DNOP	4.4		5.000		87.6	77.6	140			

Sample ID **MB-4366** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4366** RunNo: **6331**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182277** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.8	77.6	140			

Sample ID **LCS-4366** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4366** RunNo: **6331**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182278** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	10	50.00	0	66.7	52.6	130			
Surr: DNOP	4.3		5.000		86.3	77.6	140			

Sample ID **1210743-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4366** RunNo: **6331**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182280** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	31	9.9	49.55	0	62.0	57.2	146			
Surr: DNOP	4.1		4.955		82.1	77.6	140			

Sample ID **1210743-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4366** RunNo: **6331**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182281** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210743-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4366** RunNo: **6331**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182281** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	10	51.39	0	63.3	57.2	146	5.63	24.5	
Surr: DNOP	4.4		5.139		85.7	77.6	140	0	0	

Sample ID **MB-4397** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4397** RunNo: **6325**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182283** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID **LCS-4397** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4397** RunNo: **6325**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182284** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.9	77.6	140			

Sample ID **1210811-013CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-15 (1.5-2')** Batch ID: **4369** RunNo: **6331**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182453** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	10	50.51	0	68.3	57.2	146			
Surr: DNOP	4.3		5.051		86.0	77.6	140			

Sample ID **1210811-013CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 1-15 (1.5-2')** Batch ID: **4369** RunNo: **6331**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182454** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	31	9.6	48.03	0	63.7	57.2	146	12.0	24.5	
Surr: DNOP	4.0		4.803		84.0	77.6	140	0	0	

Sample ID **MB-4404** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182984** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.6	77.6	140			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**LCS-4404**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**4404**	RunNo:	**6356**				
Prep Date:	**10/18/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**182985**	Units:	**%REC**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Sample ID	**1210819-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8015B: Diesel Range Organics**				
Client ID:	**BatchQC**	Batch ID:	**4404**	RunNo:	**6356**				
Prep Date:	**10/18/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183001**	Units:	**%REC**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID	**1210819-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015B: Diesel Range Organics**				
Client ID:	**BatchQC**	Batch ID:	**4404**	RunNo:	**6356**				
Prep Date:	**10/18/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183002**	Units:	**%REC**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4383**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Diesel Range**					
Client ID:	**PBW**	Batch ID:	**4383**	RunNo:	**6305**					
Prep Date:	**10/17/2012**	Analysis Date:	**10/17/2012**	SeqNo:	**181999**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		107	79.5	166			

Sample ID	**LCS-4383**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range**					
Client ID:	**LCSW**	Batch ID:	**4383**	RunNo:	**6305**					
Prep Date:	**10/17/2012**	Analysis Date:	**10/17/2012**	SeqNo:	**182000**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.9	74	157			
Surr: DNOP	0.48		0.5000		96.6	79.5	166			

Sample ID	**LCSD-4383**	SampType:	**LCSD**	TestCode:	**EPA Method 8015B: Diesel Range**					
Client ID:	**LCSS02**	Batch ID:	**4383**	RunNo:	**6305**					
Prep Date:	**10/17/2012**	Analysis Date:	**10/17/2012**	SeqNo:	**182001**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.5	74	157	0.595	23	
Surr: DNOP	0.47		0.5000		94.9	79.5	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4420** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4420** RunNo: **6401**
Prep Date: **10/19/2012** Analysis Date: **10/22/2012** SeqNo: **184413** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.3	84	116			

Sample ID **LCS-4420** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4420** RunNo: **6401**
Prep Date: **10/19/2012** Analysis Date: **10/22/2012** SeqNo: **184414** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.7	74	117			
Surr: BFB	990		1000		99.5	84	116			

Sample ID **1210916-002AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4420** RunNo: **6401**
Prep Date: **10/19/2012** Analysis Date: **10/22/2012** SeqNo: **184418** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	35	4.8	24.06	1.798	137	70	130			S
Surr: BFB	1100		962.5		115	84	116			

Sample ID **1210916-002AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4420** RunNo: **6401**
Prep Date: **10/19/2012** Analysis Date: **10/22/2012** SeqNo: **184419** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	36	4.8	24.02	1.798	144	70	130	4.59	22.1	S
Surr: BFB	1100		960.6		117	84	116	0	0	S

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		91.7	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.5	74	117			
Surr: BFB	930		1000		93.1	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210811-011BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-14 (1.5-2')** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186249** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	5.0	15.90	0	110	70	130	12.7	22.1	
Surr: BFB	590		636.0		93.2	84	116	0	0	

Sample ID **1210811-011BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 1-14 (1.5-2')** Batch ID: **R6457** RunNo: **6487**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187647** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.91	0	96.6	70	130			
Surr: BFB	650		636.4		102	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4361**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4361**	RunNo: **6338**			
Prep Date: **10/17/2012**	Analysis Date: **10/17/2012**	SeqNo: **182426**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4361** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4361** RunNo: **6338**
Prep Date: **10/17/2012** Analysis Date: **10/17/2012** SeqNo: **182426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	47.9		50.00		95.7	70	130			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.4	70	130			
Surr: Dibromofluoromethane	53.2		50.00		106	70	130			
Surr: Toluene-d8	50.2		50.00		100	70	130			

Sample ID **lcs-4361** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4361** RunNo: **6338**
Prep Date: **10/17/2012** Analysis Date: **10/17/2012** SeqNo: **182428** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.10	1.00	8.000	0	88.8	60	140			
Toluene	6.78	1.00	8.000	0	84.8	60	140			
Chlorobenzene	8.05	1.00	8.000	0	101	60	140			
1,1-Dichloroethene	8.50	1.00	8.000	0	106	60	140			
Trichloroethene (TCE)	6.66	1.00	8.000	0	83.2	60	140			
Surr: 1,2-Dichloroethane-d4	47.3		50.00		94.6	70	130			
Surr: 4-Bromofluorobenzene	43.0		50.00		86.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4361** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4361** RunNo: **6338**
Prep Date: **10/17/2012** Analysis Date: **10/17/2012** SeqNo: **182428** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	52.5		50.00		105	70	130			
Surr: Toluene-d8	43.8		50.00		87.6	70	130			

Sample ID **mb-4393** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4393** RunNo: **6360**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182928** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4393**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4393**	RunNo: **6360**			
Prep Date: **10/18/2012**	Analysis Date: **10/18/2012**	SeqNo: **182928**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	46.1		50.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	44.8		50.00		89.6	70	130			
Surr: Dibromofluoromethane	53.0		50.00		106	70	130			
Surr: Toluene-d8	42.4		50.00		84.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4393**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4393**	RunNo:	**6360**
Prep Date:	**10/18/2012**	Analysis Date:	**10/18/2012**	SeqNo:	**182930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.87	1.00	10.00	0	88.7	60	140			
Toluene	8.50	1.00	10.00	0	85.0	60	140			
Chlorobenzene	9.38	1.00	10.00	0	93.8	60	140			
1,1-Dichloroethene	11.0	1.00	10.00	0	110	60	140			
Trichloroethene (TCE)	7.70	1.00	10.00	0	77.0	60	140			
Surr: 1,2-Dichloroethane-d4	44.9		50.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	40.9		50.00		81.7	70	130			
Surr: Dibromofluoromethane	50.4		50.00		101	70	130			
Surr: Toluene-d8	41.1		50.00		82.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6432**	RunNo: **6432**			
Prep Date:	Analysis Date: **10/19/2012**	SeqNo: **184843**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6432** RunNo: **6432**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184843** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.3	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6432** RunNo: **6432**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184845** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.1	70	130			
Toluene	20	1.0	20.00	0	102	80	120			
Chlorobenzene	19	1.0	20.00	0	94.7	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.8	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	94.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R6432**	RunNo: **6432**
Prep Date:	Analysis Date: **10/19/2012**	SeqNo: **184845** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.9		10.00		99.1	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID **b6**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R6432**	RunNo: **6432**
Prep Date:	Analysis Date: **10/19/2012**	SeqNo: **184881** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **b6**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R6432**	RunNo: **6432**	
Prep Date:	Analysis Date: **10/19/2012**	SeqNo: **184881**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.6	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210828-005ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6432** RunNo: **6432**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184887** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	66.8	128			
Toluene	22	1.0	20.00	0	111	70	130			
Chlorobenzene	20	1.0	20.00	0	99.8	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	108	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.9		10.00		99.2	70	130			

Sample ID **1210828-005amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6432** RunNo: **6432**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184888** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.8	66.8	128	3.88	16.7	
Toluene	21	1.0	20.00	0	107	70	130	3.39	18.7	
Chlorobenzene	19	1.0	20.00	0	96.3	70	130	3.62	19.5	
1,1-Dichloroethene	20	1.0	20.00	0	97.6	70	130	9.75	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.2	70	130	2.61	17.5	
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0	
Surr: Dibromofluoromethane	9.7		10.00		96.8	70	130	0	0	
Surr: Toluene-d8	9.8		10.00		98.1	70	130	0	0	

Sample ID **lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6432** RunNo: **6432**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **189689** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.1	70	130			
Toluene	20	1.0	20.00	0	100	80	120			
Chlorobenzene	20	1.0	20.00	0	99.3	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	73.7	122			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.8	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.0	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4400**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4400**	RunNo: **6384**			
Prep Date: **10/18/2012**	Analysis Date: **10/21/2012**	SeqNo: **183689**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4400** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/21/2012** SeqNo: **183689** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.0		3.330		89.4	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		94.4	20	131			
Surr: 2-Fluorophenol	2.9		3.330		88.5	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.3	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.1	25.6	137			
Surr: Phenol-d5	3.1		3.330		91.7	20.3	132			

Sample ID **lcs-4400** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/21/2012** SeqNo: **183690** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4400** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/21/2012** SeqNo: **183690** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.20	1.670	0	84.0	49.7	98.1			
4-Chloro-3-methylphenol	2.7	0.50	3.330	0	81.7	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	76.1	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	75.4	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.7	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.6	39.1	86.9			
4-Nitrophenol	2.5	0.25	3.330	0	74.6	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	64.2	36.2	80			
Phenol	2.5	0.20	3.330	0	74.2	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	76.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.4	0.20	1.670	0	85.3	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.6		3.330		109	21.3	145			
Surr: 2-Fluorobiphenyl	1.8		1.670		109	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.8	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		87.1	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		108	25.6	137			
Surr: Phenol-d5	3.2		3.330		95.9	20.3	132			

Sample ID **1210811-002CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-9 (1.5-2')** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/22/2012** SeqNo: **183711** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.673	0	71.4	25.6	142			
4-Chloro-3-methylphenol	2.4	0.50	3.337	0	71.1	63.7	100			
2-Chlorophenol	2.4	0.20	3.337	0	72.7	22.2	126			
1,4-Dichlorobenzene	1.2	0.20	1.673	0	70.8	12.4	115			
2,4-Dinitrotoluene	1.3	0.50	1.673	0	78.0	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.20	1.673	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.25	3.337	0.09450	69.3	36.7	130			
Pentachlorophenol	2.2	0.40	3.337	0	65.2	15.8	113			
Phenol	2.3	0.20	3.337	0	69.9	25.1	124			
Pyrene	1.1	0.20	1.673	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.20	1.673	0	84.8	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.337		89.9	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.673		88.8	20	131			
Surr: 2-Fluorophenol	2.7		3.337		80.1	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.673		76.2	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.673		105	25.6	137			
Surr: Phenol-d5	3.0		3.337		89.7	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210811-002CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-9 (1.5-2')** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/22/2012** SeqNo: **183712** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.674	0	73.4	25.6	142	2.79	22	
4-Chloro-3-methylphenol	2.3	0.50	3.338	0	68.2	63.7	100	3.99	27.3	
2-Chlorophenol	2.4	0.20	3.338	0	71.5	22.2	126	1.58	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.674	0	66.1	12.4	115	6.82	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.674	0	80.4	14.9	142	3.08	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.674	0	75.8	13.9	136	7.08	22.6	
4-Nitrophenol	2.5	0.25	3.338	0.09450	73.3	36.7	130	5.48	20	
Pentachlorophenol	2.1	0.40	3.338	0	62.8	15.8	113	3.74	27.1	
Phenol	2.1	0.20	3.338	0	64.0	25.1	124	8.86	32.2	
Pyrene	1.2	0.20	1.674	0	71.6	35.8	124	4.33	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.674	0	81.2	30	113	4.27	27.8	
Surr: 2,4,6-Tribromophenol	2.8		3.338		83.7	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.674		90.7	20	131	0	0	
Surr: 2-Fluorophenol	2.6		3.338		79.2	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.674		76.3	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.674		96.8	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.338		85.8	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4411**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4411**	RunNo: **6416**			
Prep Date: **10/19/2012**	Analysis Date: **10/22/2012**	SeqNo: **184532**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4411**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4411**	RunNo: **6416**			
Prep Date: **10/19/2012**	Analysis Date: **10/22/2012**	SeqNo: **184532**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	180		200.0		89.0	42.9	124			
Surr: 2-Fluorobiphenyl	74		100.0		73.7	40	108			
Surr: 2-Fluorophenol	130		200.0		63.3	23.6	94.8			
Surr: 4-Terphenyl-d14	75		100.0		74.5	41.9	103			
Surr: Nitrobenzene-d5	91		100.0		90.8	42.6	114			
Surr: Phenol-d5	100		200.0		49.9	20.3	74.7			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4411** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **4411** RunNo: **6416**
Prep Date: **10/19/2012** Analysis Date: **10/22/2012** SeqNo: **184533** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	69	10	100.0	0	69.3	43.3	92			
4-Chloro-3-methylphenol	150	10	200.0	0	72.7	46.3	108			
2-Chlorophenol	130	10	200.0	0	65.3	38	99.3			
1,4-Dichlorobenzene	62	10	100.0	0	61.6	30.8	80.6			
2,4-Dinitrotoluene	73	10	100.0	0	73.1	46.1	117			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	39.3	110			
4-Nitrophenol	80	10	200.0	0	39.8	29.8	67			
Pentachlorophenol	110	20	200.0	0	55.3	32.2	95.7			
Phenol	78	10	200.0	0	39.2	27	64.8			
Pyrene	72	10	100.0	0	71.5	44.7	97.3			
1,2,4-Trichlorobenzene	73	10	100.0	0	72.7	36.6	86.7			
Surr: 2,4,6-Tribromophenol	170		200.0		87.4	42.9	124			
Surr: 2-Fluorobiphenyl	81		100.0		81.3	40	108			
Surr: 2-Fluorophenol	120		200.0		60.0	23.6	94.8			
Surr: 4-Terphenyl-d14	74		100.0		74.1	41.9	103			
Surr: Nitrobenzene-d5	85		100.0		84.8	42.6	114			
Surr: Phenol-d5	100		200.0		50.3	20.3	74.7			

Sample ID **lcsd-4411** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **4411** RunNo: **6416**
Prep Date: **10/19/2012** Analysis Date: **10/22/2012** SeqNo: **184535** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	63	10	100.0	0	62.5	43.3	92	10.3	25	
4-Chloro-3-methylphenol	140	10	200.0	0	67.6	46.3	108	7.30	32.7	
2-Chlorophenol	120	10	200.0	0	59.8	38	99.3	8.77	20	
1,4-Dichlorobenzene	54	10	100.0	0	53.8	30.8	80.6	13.6	20	
2,4-Dinitrotoluene	70	10	100.0	0	70.2	46.1	117	4.16	29.9	
N-Nitrosodi-n-propylamine	65	10	100.0	0	64.8	39.3	110	11.9	23.1	
4-Nitrophenol	75	10	200.0	0	37.7	29.8	67	5.34	40.5	
Pentachlorophenol	110	20	200.0	0	54.1	32.2	95.7	2.07	37.3	
Phenol	68	10	200.0	0	34.1	27	64.8	14.1	20	
Pyrene	68	10	100.0	0	67.9	44.7	97.3	5.13	26.5	
1,2,4-Trichlorobenzene	67	10	100.0	0	66.7	36.6	86.7	8.58	27.2	
Surr: 2,4,6-Tribromophenol	170		200.0		87.5	42.9	124	0	0	
Surr: 2-Fluorobiphenyl	72		100.0		71.5	40	108	0	0	
Surr: 2-Fluorophenol	110		200.0		53.9	23.6	94.8	0	0	
Surr: 4-Terphenyl-d14	72		100.0		72.5	41.9	103	0	0	
Surr: Nitrobenzene-d5	77		100.0		76.5	42.6	114	0	0	
Surr: Phenol-d5	90		200.0		45.1	20.3	74.7	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4425** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4425** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185335** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4425** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4425** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185336** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	99.4	80	120			

Sample ID **1210811-014CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-16 (0-0.5')** Batch ID: **4425** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185361** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1670	0.02118	109	75	125			

Sample ID **1210811-014CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-16 (0-0.5')** Batch ID: **4425** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185362** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1653	0.02118	109	75	125	1.12	20	

Sample ID **MB-4426** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185363** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4426** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185364** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID **1210859-002CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185391** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1654	0.01134	102	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210859-002CMSD**	SampType:	**MSD**	TestCode:	**EPA Method 7471: Mercury**
Client ID:	**BatchQC**	Batch ID:	**4426**	RunNo:	**6443**
Prep Date:	**10/19/2012**	Analysis Date:	**10/23/2012**	SeqNo:	**185392** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1685	0.01134	99.0	75	125	1.06	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4583** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4583** RunNo: **6598**
Prep Date: **10/30/2012** Analysis Date: **10/31/2012** SeqNo: **190592** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4583** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4583** RunNo: **6598**
Prep Date: **10/30/2012** Analysis Date: **10/31/2012** SeqNo: **190593** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	96.4	80	120			
Arsenic	25	2.5	25.00	0	102	80	120			
Barium	24	0.10	25.00	0	97.4	80	120			
Beryllium	26	0.15	25.00	0	103	80	120			
Cadmium	25	0.10	25.00	0	98.8	80	120			
Chromium	25	0.30	25.00	0	98.7	80	120			
Iron	25	1.0	25.00	0.8055	96.4	80	120			
Lead	24	0.25	25.00	0	97.2	80	120			
Manganese	24	0.10	25.00	0.03200	96.1	80	120			
Nickel	24	0.50	25.00	0	94.6	80	120			
Selenium	24	2.5	25.00	0	96.0	80	120			
Vanadium	25	2.5	25.00	0	101	80	120			
Zinc	24	2.5	25.00	0	97.8	80	120			

Sample ID **MB-4499** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4499** RunNo: **6598**
Prep Date: **10/24/2012** Analysis Date: **10/31/2012** SeqNo: **190715** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4499** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4499** RunNo: **6598**
Prep Date: **10/24/2012** Analysis Date: **10/31/2012** SeqNo: **190715** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								

Sample ID **LCS-4499** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4499** RunNo: **6598**
Prep Date: **10/24/2012** Analysis Date: **10/31/2012** SeqNo: **190716** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	27	2.5	25.00	0	108	80	120			
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	26	0.10	25.00	0	104	80	120			
Beryllium	28	0.15	25.00	0.01050	114	80	120			
Cadmium	27	0.10	25.00	0	108	80	120			
Chromium	26	0.30	25.00	0	102	80	120			
Lead	27	0.25	25.00	0	106	80	120			
Manganese	26	0.10	25.00	0.02950	103	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	32	2.5	25.00	0	128	80	120			S
Silver	5.1	0.25	5.000	0	101	80	120			
Vanadium	26	2.5	25.00	0.08900	105	80	120			

Sample ID **MB-4499** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4499** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192435** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.30								
Iron	ND	1.0								
Selenium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4499** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4499** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192436** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **LCS-4499** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4499** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192436** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	26	0.30	25.00	0	102	80	120			
Iron	27	1.0	25.00	0	106	80	120			
Selenium	29	2.5	25.00	0	117	80	120			
Zinc	27	2.5	25.00	0	106	80	120			

Sample ID **1210811-016CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-17 (0-0.5')** Batch ID: **4499** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192540** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	27	0.30	24.90	0.6732	107	75	125			
Cadmium	26	0.20	24.90	0	105	75	125			
Chromium	33	0.60	24.90	6.613	104	75	125			
Cobalt	28	0.60	24.90	4.089	96.6	75	125			
Lead	23	0.50	24.90	0.8184	89.2	75	125			
Nickel	30	1.0	24.90	6.438	94.0	75	125			
Silver	4.9	0.50	4.979	0	99.3	75	125			
Vanadium	46	5.0	24.90	18.97	109	75	125			
Zinc	40	5.0	24.90	15.37	99.3	75	125			

Sample ID **1210811-016CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-17 (0-0.5')** Batch ID: **4499** RunNo: **6670**
Prep Date: **10/24/2012** Analysis Date: **11/2/2012** SeqNo: **192541** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	26	0.30	24.83	0.6732	101	75	125	5.69	20	
Cadmium	25	0.20	24.83	0	100	75	125	4.75	20	
Chromium	30	0.60	24.83	6.613	93.2	75	125	8.99	20	
Cobalt	27	0.60	24.83	4.089	90.7	75	125	5.59	20	
Lead	23	0.50	24.83	0.8184	87.6	75	125	1.99	20	
Nickel	28	1.0	24.83	6.438	86.7	75	125	6.41	20	
Silver	4.7	0.50	4.967	0	95.0	75	125	4.71	20	
Vanadium	42	5.0	24.83	18.97	92.5	75	125	9.29	20	
Zinc	38	5.0	24.83	15.37	89.3	75	125	6.54	20	

Sample ID **1210C58-003CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4583** RunNo: **6663**
Prep Date: **10/30/2012** Analysis Date: **11/2/2012** SeqNo: **192743** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	24.84	2.875	86.2	75	125			
Barium	42	0.10	24.84	12.37	120	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210C58-003CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4583** RunNo: **6663**
Prep Date: **10/30/2012** Analysis Date: **11/2/2012** SeqNo: **192743** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	21	0.10	24.84	0	85.3	75	125			
Chromium	24	0.30	24.84	1.934	89.0	75	125			
Selenium	20	2.5	24.84	0	78.6	75	125			

Sample ID **1210C58-003CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4583** RunNo: **6663**
Prep Date: **10/30/2012** Analysis Date: **11/2/2012** SeqNo: **192744** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	28	2.5	24.62	2.875	102	75	125	14.5	20	
Barium	39	0.10	24.62	12.37	108	75	125	7.61	20	
Cadmium	21	0.10	24.62	0	86.7	75	125	0.763	20	
Chromium	24	0.30	24.62	1.934	90.1	75	125	0.297	20	
Selenium	20	2.5	24.62	0	80.9	75	125	1.99	20	

Sample ID **MB-4745** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4745** RunNo: **6879**
Prep Date: **11/8/2012** Analysis Date: **11/13/2012** SeqNo: **198947** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID **LCS-4745** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4745** RunNo: **6879**
Prep Date: **11/8/2012** Analysis Date: **11/13/2012** SeqNo: **198948** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.6	0.25	5.000	0	112	80	120			

Sample ID **1210C58-003CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4745** RunNo: **6885**
Prep Date: **11/8/2012** Analysis Date: **11/14/2012** SeqNo: **199235** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.4	0.25	4.807	0.06026	91.2	75	125			

Sample ID **1210C58-003CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4745** RunNo: **6885**
Prep Date: **11/8/2012** Analysis Date: **11/14/2012** SeqNo: **199236** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.9	0.25	4.918	0.06026	97.9	75	125	9.20	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210811-016CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-17 (0-0.5')** Batch ID: **4499** RunNo: **7112**
Prep Date: **10/24/2012** Analysis Date: **11/27/2012** SeqNo: **206181** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	24.90	0	0	75	125			S
Arsenic	28	5.0	24.90	4.739	93.9	75	125			
Selenium	18	5.0	24.90	0	71.6	75	125			S

Sample ID **1210811-016CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 1-17 (0-0.5')** Batch ID: **4499** RunNo: **7112**
Prep Date: **10/24/2012** Analysis Date: **11/27/2012** SeqNo: **206182** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	24.83	0	0	75	125	0	20	S
Arsenic	29	5.0	24.83	4.739	99.5	75	125	4.69	20	
Selenium	17	5.0	24.83	0	67.3	75	125	6.49	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210811**
29-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **b6** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184074** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		95.8	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184077** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	86.2	85	115			
Surr: BFB	10		10.00		99.9	70	130			

Sample ID **1210660-001ams** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184078** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.0	0.25	2.500	1.915	82.1	70	130			
Surr: BFB	46		50.00		91.6	70	130			

Sample ID **1210660-001amsd** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184079** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3.8	0.25	2.500	1.915	76.4	70	130	3.70	20	
Surr: BFB	51		50.00		102	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210811

Received by/date: MG 10/17/12

Logged By: Michelle Garcia 10/17/2012 8:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 10/17/2012 9:05:43 AM Michelle Garcia

Reviewed By: MG 10/17/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210811	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/15/12	1055	SOIL	SWMU 1-9 (0-0.5')	2 VIALS	SOBI	-001										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1105		SWMU 1-9 (1.5-2')	2 VIALS	SOBI	-002										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1120		SWMU 1-10 (0-0.5')	2 VIALS	SOBI	-003										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1130		SWMU 1-10 (1.5-2')	2 VIALS	SOBI	-004										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/16/12	0720	[signature]	[signature]	10/17/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210811	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/15/12	1205	SOIL	SWMU 1-11 (0-0.5')	2 VIALS	SOBI	-005										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1220		SWMU 1-11 (1.5-2')	2 VIALS	SOBI	-006										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

Date	Time	Relinquished by:	Received by:	Date	Time
10/16/12	0720	[signature]	[signature]	10/17/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☐ Yes ☐ No
Sample Temperature:

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210811	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/15/12	1445	SOIL	SWMU 1-12(0-0.5')	2 VIALS	SOBI	-007										X						
	↓		↓	2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1500		SWMU 1-12(0.5-1')	2 VIALS	SOBI	-008										X						
	↓		↓	2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1530		SWMU 1-14(0-0.5')	2 VIALS	SOBI	-009										X						
	↓		↓	2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1555		SWMU 1-14(1.5-2)	2 VIALS	SOBI	-010										X						
	↓		↓	2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/16/12	0720	[illegible]	[illegible]	10/17/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210811	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/15/12	1555	SOIL	SWMU 1-14 (1.5-2')	2 VIALS	SOBI	-011										X						
			DUP	2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1620		SWMU 1-15 (0-0.5')	2 VIALS	SOBI	-012										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1630		SWMU 1-15 (1.5-2')	2 VIALS	SOBI	-013										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date	Time	Relinquished by:	Received by:	Date	Time
10/16/12	0720	[signature]	[signature]	10/17/12	0800
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QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210811	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/15/12	1655	SOIL	SWMU 1-16 (0-0.5')	2 VIALS	SOBI	-014										X						
	↓		↓	2 VIALS	MEOH											X						
	↓		↓	3 JARS	—											X	X	X	X			
	1705		SWMU 1-16 (1.5-2')	2 VIALS	SOBI	-015										X						
	↓		↓	2 VIALS	MEOH											X						
	↓		↓	3 JARS	—											X	X	X	X			
	1730		SWMU 1-17 (0-0.5')	2 VIALS	SOBI	-016										X						
	↓		↓	2 VIALS	MEOH											X						
	↓		↓	3 JARS	—											X	X	X	X			
	1740		SWMU 1-17 (1-1.5')	2 VIALS	SOBI	-017										X						
	↓		↓	2 VIALS	MEOH											X						
	↓		↓	3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/16/12	0720	[signature]	[signature]	10/17/12	0800
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GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

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Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210841	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/15/12	1800	W	EB101512	6 VOA	HCL	-018										X						
↓	↓	↓	↓	1 AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
				1 PLASTIC	—														X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/16/12	0720	[signature]	[signature]	10/17/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg

+ Cn

+ Anions

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 21, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210856

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210856**
Date Reported: **11/21/2012**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-31 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 3:00:00 PM
Lab ID: 1210856-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 8:45:13 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/21/2012 8:45:13 AM
Surr: DNOP	103	77.6-140		%REC	1	10/21/2012 8:45:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 7:17:23 PM
Surr: BFB	91.0	84-116		%REC	1	10/24/2012 7:17:23 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.063	0.033		mg/kg	1	10/23/2012 6:32:17 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
Barium	350	1.0		mg/Kg	10	10/25/2012 1:29:20 PM
Beryllium	0.56	0.30		mg/Kg	2	10/25/2012 11:38:41 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:38:41 AM
Chromium	12	0.60		mg/Kg	2	10/25/2012 11:38:41 AM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 11:38:41 AM
Iron	13000	500		mg/Kg	500	11/2/2012 6:51:37 AM
Lead	5.2	0.50		mg/Kg	2	10/25/2012 11:38:41 AM
Manganese	420	1.0		mg/Kg	10	10/25/2012 1:29:20 PM
Nickel	8.0	1.0		mg/Kg	2	10/25/2012 11:38:41 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 3:19:29 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
Zinc	30	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Acenaphthylene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Aniline	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Anthracene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Azobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzoic acid	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-31 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 3:00:00 PM
Lab ID: 1210856-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Carbazole	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/22/2012 8:48:45 AM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Chrysene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Dibenzofuran	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/22/2012 8:48:45 AM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/22/2012 8:48:45 AM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
Fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Fluorene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Hexachloroethane	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Isophorone	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Methylphenol	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Naphthalene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-31 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 3:00:00 PM
Lab ID: 1210856-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
Nitrobenzene	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/22/2012 8:48:45 AM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
Phenanthrene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Phenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Pyrene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Pyridine	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Surr: 2,4,6-Tribromophenol	93.6	21.3-145		%REC	1	10/22/2012 8:48:45 AM
Surr: 2-Fluorobiphenyl	90.8	20-131		%REC	1	10/22/2012 8:48:45 AM
Surr: 2-Fluorophenol	81.9	11.9-130		%REC	1	10/22/2012 8:48:45 AM
Surr: 4-Terphenyl-d14	119	25.1-149		%REC	1	10/22/2012 8:48:45 AM
Surr: Nitrobenzene-d5	91.2	25.6-137		%REC	1	10/22/2012 8:48:45 AM
Surr: Phenol-d5	94.1	20.3-132		%REC	1	10/22/2012 8:48:45 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00119	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Toluene	0.00295	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Ethylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Xylenes, Total	0.00320	0.00168		mg/Kg	1	10/18/2012 1:18:41 PM
Methyl tert-butyl ether (MTBE)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2,4-Trimethylbenzene	0.00138	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,3,5-Trimethylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dichloroethane (EDC)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dibromoethane (EDB)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Naphthalene	ND	0.00168		mg/Kg	1	10/18/2012 1:18:41 PM
1-Methylnaphthalene	ND	0.00335		mg/Kg	1	10/18/2012 1:18:41 PM
2-Methylnaphthalene	ND	0.00335		mg/Kg	1	10/18/2012 1:18:41 PM
Acetone	0.0344	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
Bromobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Bromodichloromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Bromoform	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Bromomethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
2-Butanone	ND	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
Carbon tetrachloride	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Chlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Chloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM

Qualifiers:

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

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Lab ID: 1210856-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Chloromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
2-Chlorotoluene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Carbon disulfide	ND	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
4-Chlorotoluene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
cis-1,2-DCE	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
cis-1,3-Dichloropropene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dibromo-3-chloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Dibromochloromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Dibromomethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,3-Dichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,4-Dichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Dichlorodifluoromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1-Dichloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1-Dichloroethene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dichloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,3-Dichloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
2,2-Dichloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1-Dichloropropene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Hexachlorobutadiene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Isopropylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
4-Isopropyltoluene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Methylene chloride	ND	0.00252		mg/Kg	1	10/18/2012 1:18:41 PM
n-Butylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
2-Hexanone	ND	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
n-Propylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
sec-Butylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Styrene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
4-Methyl-2-pentanone	ND	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
tert-Butylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1,1,2-Tetrachloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1,2,2-Tetrachloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Tetrachloroethene (PCE)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
trans-1,2-DCE	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
trans-1,3-Dichloropropene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2,3-Trichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2,4-Trichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1,1-Trichloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1,2-Trichloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Trichloroethene (TCE)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Trichlorofluoromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM

Qualifiers:

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-31 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 3:00:00 PM
Lab ID: 1210856-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Vinyl chloride	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%REC	1	10/18/2012 1:18:41 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	1	10/18/2012 1:18:41 PM
Surr: Dibromofluoromethane	99.9	70-130		%REC	1	10/18/2012 1:18:41 PM
Surr: Toluene-d8	89.3	70-130		%REC	1	10/18/2012 1:18:41 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-32 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 3:40:00 PM
Lab ID: 1210856-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	19	9.7		mg/Kg	1	10/21/2012 3:01:01 PM
Motor Oil Range Organics (MRO)	100	48		mg/Kg	1	10/21/2012 3:01:01 PM
Surr: DNOP	106	77.6-140		%REC	1	10/21/2012 3:01:01 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 11:07:20 PM
Surr: BFB	86.2	84-116		%REC	1	10/24/2012 11:07:20 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.13	0.033		mg/kg	1	10/23/2012 6:34:06 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
Barium	600	2.0		mg/Kg	20	10/25/2012 2:44:01 PM
Beryllium	0.64	0.30		mg/Kg	2	10/25/2012 11:43:44 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:43:44 AM
Chromium	17	0.60		mg/Kg	2	10/25/2012 11:43:44 AM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 11:43:44 AM
Iron	14000	500		mg/Kg	500	11/2/2012 6:54:30 AM
Lead	6.3	0.50		mg/Kg	2	10/25/2012 11:43:44 AM
Manganese	440	1.0		mg/Kg	10	10/25/2012 1:34:12 PM
Nickel	13	1.0		mg/Kg	2	10/25/2012 11:43:44 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
Silver	ND	0.25		mg/Kg	1	10/29/2012 3:24:30 PM
Vanadium	22	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
Zinc	36	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Aniline	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Anthracene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Azobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-32 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 3:40:00 PM
Lab ID: 1210856-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Carbazole	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/23/2012 5:37:35 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Chrysene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/23/2012 5:37:35 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/23/2012 5:37:35 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Fluorene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Isophorone	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Naphthalene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/23/2012 5:37:35 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Phenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Pyrene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Pyridine	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Surr: 2,4,6-Tribromophenol	112	21.3-145		%REC	1	10/23/2012 5:37:35 PM
Surr: 2-Fluorobiphenyl	103	20-131		%REC	1	10/23/2012 5:37:35 PM
Surr: 2-Fluorophenol	99.0	11.9-130		%REC	1	10/23/2012 5:37:35 PM
Surr: 4-Terphenyl-d14	126	25.1-149		%REC	1	10/23/2012 5:37:35 PM
Surr: Nitrobenzene-d5	97.0	25.6-137		%REC	1	10/23/2012 5:37:35 PM
Surr: Phenol-d5	102	20.3-132		%REC	1	10/23/2012 5:37:35 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00140	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Toluene	0.00442	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Ethylbenzene	0.00107	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Xylenes, Total	0.00394	0.00165		mg/Kg	1	10/18/2012 1:49:28 PM
Methyl tert-butyl ether (MTBE)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2,4-Trimethylbenzene	0.00179	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,3,5-Trimethylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dichloroethane (EDC)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dibromoethane (EDB)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Naphthalene	ND	0.00165		mg/Kg	1	10/18/2012 1:49:28 PM
1-Methylnaphthalene	ND	0.00331		mg/Kg	1	10/18/2012 1:49:28 PM
2-Methylnaphthalene	ND	0.00331		mg/Kg	1	10/18/2012 1:49:28 PM
Acetone	0.0551	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
Bromobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Bromodichloromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Bromoform	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Bromomethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
2-Butanone	ND	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
Carbon tetrachloride	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Chlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Chloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-32 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 3:40:00 PM
Lab ID: 1210856-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Chloromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
2-Chlorotoluene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Carbon disulfide	ND	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
4-Chlorotoluene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
cis-1,2-DCE	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
cis-1,3-Dichloropropene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dibromo-3-chloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Dibromochloromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Dibromomethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,3-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,4-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Dichlorodifluoromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1-Dichloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1-Dichloroethene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dichloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,3-Dichloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
2,2-Dichloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1-Dichloropropene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Hexachlorobutadiene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Isopropylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
4-Isopropyltoluene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Methylene chloride	ND	0.00248		mg/Kg	1	10/18/2012 1:49:28 PM
n-Butylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
2-Hexanone	ND	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
n-Propylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
sec-Butylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Styrene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
4-Methyl-2-pentanone	ND	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
tert-Butylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1,1,2-Tetrachloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1,2,2-Tetrachloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Tetrachloroethene (PCE)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
trans-1,2-DCE	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
trans-1,3-Dichloropropene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2,3-Trichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2,4-Trichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1,1-Trichloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1,2-Trichloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Trichloroethene (TCE)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Trichlorofluoromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-32 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 3:40:00 PM
Lab ID: 1210856-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Vinyl chloride	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	10/18/2012 1:49:28 PM
Surr: 4-Bromofluorobenzene	120	70-130		%REC	1	10/18/2012 1:49:28 PM
Surr: Dibromofluoromethane	108	70-130		%REC	1	10/18/2012 1:49:28 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/18/2012 1:49:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-32 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/16/2012 3:40:00 PM
Lab ID: 1210856-003 **Matrix:** SOIL **Received Date:** 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	29	10		mg/Kg	1	10/21/2012 4:17:09 PM
Motor Oil Range Organics (MRO)	200	51		mg/Kg	1	10/21/2012 4:17:09 PM
Surr: DNOP	112	77.6-140		%REC	1	10/21/2012 4:17:09 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 11:36:04 PM
Surr: BFB	88.3	84-116		%REC	1	10/24/2012 11:36:04 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.13	0.033		mg/kg	1	10/23/2012 6:35:52 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
Barium	580	2.0		mg/Kg	20	10/25/2012 2:48:50 PM
Beryllium	0.66	0.30		mg/Kg	2	10/25/2012 11:50:31 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:50:31 AM
Chromium	21	0.60		mg/Kg	2	10/25/2012 11:50:31 AM
Cobalt	5.1	0.60		mg/Kg	2	10/25/2012 11:50:31 AM
Iron	19000	500		mg/Kg	500	11/2/2012 6:57:23 AM
Lead	8.0	0.50		mg/Kg	2	10/25/2012 11:50:31 AM
Manganese	540	2.0		mg/Kg	20	10/25/2012 2:48:50 PM
Nickel	16	1.0		mg/Kg	2	10/25/2012 11:50:31 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 3:41:51 PM
Vanadium	28	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
Zinc	43	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Aniline	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Azobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-32 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/16/2012 3:40:00 PM
Lab ID: 1210856-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Carbazole	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/23/2012 6:07:04 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Chrysene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/23/2012 6:07:04 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/23/2012 6:07:04 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Fluorene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Isophorone	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Naphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-32 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/16/2012 3:40:00 PM
Lab ID: 1210856-003 **Matrix:** SOIL **Received Date:** 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/23/2012 6:07:04 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Phenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Pyridine	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Surr: 2,4,6-Tribromophenol	95.1	21.3-145		%REC	1	10/23/2012 6:07:04 PM
Surr: 2-Fluorobiphenyl	91.6	20-131		%REC	1	10/23/2012 6:07:04 PM
Surr: 2-Fluorophenol	81.6	11.9-130		%REC	1	10/23/2012 6:07:04 PM
Surr: 4-Terphenyl-d14	120	25.1-149		%REC	1	10/23/2012 6:07:04 PM
Surr: Nitrobenzene-d5	85.6	25.6-137		%REC	1	10/23/2012 6:07:04 PM
Surr: Phenol-d5	86.6	20.3-132		%REC	1	10/23/2012 6:07:04 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00134	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Toluene	0.00384	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Ethylbenzene	0.00105	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Xylenes, Total	0.00404	0.00167		mg/Kg	1	10/18/2012 2:20:20 PM
Methyl tert-butyl ether (MTBE)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2,4-Trimethylbenzene	0.00207	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,3,5-Trimethylbenzene	0.000842	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dichloroethane (EDC)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dibromoethane (EDB)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Naphthalene	ND	0.00167		mg/Kg	1	10/18/2012 2:20:20 PM
1-Methylnaphthalene	ND	0.00333		mg/Kg	1	10/18/2012 2:20:20 PM
2-Methylnaphthalene	ND	0.00333		mg/Kg	1	10/18/2012 2:20:20 PM
Acetone	0.0483	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
Bromobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Bromodichloromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Bromoform	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Bromomethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
2-Butanone	ND	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
Carbon tetrachloride	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Chlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Chloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-32 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/16/2012 3:40:00 PM
Lab ID: 1210856-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Chloromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
2-Chlorotoluene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Carbon disulfide	ND	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
4-Chlorotoluene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
cis-1,2-DCE	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
cis-1,3-Dichloropropene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dibromo-3-chloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Dibromochloromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Dibromomethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,3-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,4-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Dichlorodifluoromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1-Dichloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1-Dichloroethene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dichloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,3-Dichloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
2,2-Dichloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1-Dichloropropene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Hexachlorobutadiene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Isopropylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
4-Isopropyltoluene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Methylene chloride	ND	0.00250		mg/Kg	1	10/18/2012 2:20:20 PM
n-Butylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
2-Hexanone	ND	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
n-Propylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
sec-Butylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Styrene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
4-Methyl-2-pentanone	ND	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
tert-Butylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1,1,2-Tetrachloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1,2,2-Tetrachloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Tetrachloroethene (PCE)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
trans-1,2-DCE	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
trans-1,3-Dichloropropene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2,3-Trichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2,4-Trichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1,1-Trichloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1,2-Trichloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Trichloroethene (TCE)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Trichlorofluoromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: SWMU 1-32 (0-0.5') DUP
Project: SWMU NO.1
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Lab ID: 1210856-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Vinyl chloride	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	10/18/2012 2:20:20 PM
Surr: 4-Bromofluorobenzene	126	70-130		%REC	1	10/18/2012 2:20:20 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/18/2012 2:20:20 PM
Surr: Toluene-d8	98.2	70-130		%REC	1	10/18/2012 2:20:20 PM

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Lab ID: 1210856-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	20	9.8		mg/Kg	1	10/21/2012 3:26:23 PM
Motor Oil Range Organics (MRO)	110	49		mg/Kg	1	10/21/2012 3:26:23 PM
Surr: DNOP	106	77.6-140		%REC	1	10/21/2012 3:26:23 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 12:04:52 AM
Surr: BFB	90.2	84-116		%REC	1	10/25/2012 12:04:52 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.055	0.033		mg/kg	1	10/23/2012 6:37:39 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
Barium	680	2.0		mg/Kg	20	10/25/2012 1:52:47 PM
Beryllium	0.64	0.30		mg/Kg	2	10/25/2012 11:55:53 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:55:53 AM
Chromium	12	0.60		mg/Kg	2	10/25/2012 11:55:53 AM
Cobalt	3.2	0.60		mg/Kg	2	10/25/2012 11:55:53 AM
Iron	13000	500		mg/Kg	500	11/2/2012 7:00:17 AM
Lead	3.7	0.50		mg/Kg	2	10/25/2012 11:55:53 AM
Manganese	800	2.0		mg/Kg	20	10/25/2012 1:52:47 PM
Nickel	8.9	1.0		mg/Kg	2	10/25/2012 11:55:53 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
Silver	ND	0.25		mg/Kg	1	10/29/2012 3:47:14 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
Zinc	23	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Aniline	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Azobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM

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Collection Date: 10/16/2012 4:03:00 PM
Lab ID: 1210856-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Carbazole	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/23/2012 6:36:34 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Chrysene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/23/2012 6:36:34 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/23/2012 6:36:34 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Fluorene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Isophorone	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Naphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-33 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 4:03:00 PM
Lab ID: 1210856-004
Matrix: SOIL
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/23/2012 6:36:34 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Phenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Pyridine	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Surr: 2,4,6-Tribromophenol	92.9	21.3-145		%REC	1	10/23/2012 6:36:34 PM
Surr: 2-Fluorobiphenyl	89.4	20-131		%REC	1	10/23/2012 6:36:34 PM
Surr: 2-Fluorophenol	80.5	11.9-130		%REC	1	10/23/2012 6:36:34 PM
Surr: 4-Terphenyl-d14	117	25.1-149		%REC	1	10/23/2012 6:36:34 PM
Surr: Nitrobenzene-d5	85.6	25.6-137		%REC	1	10/23/2012 6:36:34 PM
Surr: Phenol-d5	86.2	20.3-132		%REC	1	10/23/2012 6:36:34 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00146	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Toluene	0.00437	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Ethylbenzene	0.00103	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Xylenes, Total	0.00362	0.00180		mg/Kg	1	10/18/2012 2:51:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2,4-Trimethylbenzene	0.00116	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,3,5-Trimethylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dichloroethane (EDC)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dibromoethane (EDB)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Naphthalene	ND	0.00180		mg/Kg	1	10/18/2012 2:51:16 PM
1-Methylnaphthalene	ND	0.00359		mg/Kg	1	10/18/2012 2:51:16 PM
2-Methylnaphthalene	ND	0.00359		mg/Kg	1	10/18/2012 2:51:16 PM
Acetone	0.0526	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
Bromobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Bromodichloromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Bromoform	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Bromomethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
2-Butanone	ND	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
Carbon tetrachloride	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Chlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Chloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Chloromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
2-Chlorotoluene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Carbon disulfide	ND	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
4-Chlorotoluene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
cis-1,2-DCE	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
cis-1,3-Dichloropropene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dibromo-3-chloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Dibromochloromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Dibromomethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,3-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,4-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Dichlorodifluoromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1-Dichloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1-Dichloroethene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dichloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,3-Dichloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
2,2-Dichloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1-Dichloropropene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Hexachlorobutadiene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Isopropylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
4-Isopropyltoluene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Methylene chloride	ND	0.00270		mg/Kg	1	10/18/2012 2:51:16 PM
n-Butylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
2-Hexanone	ND	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
n-Propylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
sec-Butylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Styrene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
4-Methyl-2-pentanone	ND	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
tert-Butylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1,1,2-Tetrachloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1,2,2-Tetrachloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Tetrachloroethene (PCE)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
trans-1,2-DCE	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
trans-1,3-Dichloropropene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2,3-Trichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2,4-Trichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1,1-Trichloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1,2-Trichloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Trichloroethene (TCE)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Trichlorofluoromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-33 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 4:03:00 PM
Lab ID: 1210856-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Vinyl chloride	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%REC	1	10/18/2012 2:51:16 PM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	10/18/2012 2:51:16 PM
Surr: Dibromofluoromethane	95.7	70-130		%REC	1	10/18/2012 2:51:16 PM
Surr: Toluene-d8	86.1	70-130		%REC	1	10/18/2012 2:51:16 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-34 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 4:30:00 PM
Lab ID: 1210856-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/21/2012 9:35:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/21/2012 9:35:22 AM
Surr: DNOP	106	77.6-140		%REC	1	10/21/2012 9:35:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 1:30:57 AM
Surr: BFB	90.7	84-116		%REC	1	10/25/2012 1:30:57 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.14	0.033		mg/kg	1	10/23/2012 6:39:27 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
Barium	740	2.0		mg/Kg	20	10/25/2012 1:57:39 PM
Beryllium	0.52	0.30		mg/Kg	2	10/25/2012 12:09:46 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 12:09:46 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 12:09:46 PM
Cobalt	2.7	0.60		mg/Kg	2	10/25/2012 12:09:46 PM
Iron	9800	500		mg/Kg	500	11/2/2012 7:03:09 AM
Lead	2.5	0.50		mg/Kg	2	10/25/2012 12:09:46 PM
Manganese	520	2.0		mg/Kg	20	10/25/2012 1:57:39 PM
Nickel	7.5	1.0		mg/Kg	2	10/25/2012 12:09:46 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
Silver	ND	0.25		mg/Kg	1	10/29/2012 3:52:27 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
Zinc	28	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Aniline	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Anthracene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Azobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-34 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 4:30:00 PM
Lab ID: 1210856-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Carbazole	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/23/2012 7:06:02 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Chrysene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/23/2012 7:06:02 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/23/2012 7:06:02 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Fluorene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Isophorone	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Naphthalene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-34 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 4:30:00 PM
Lab ID: 1210856-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/23/2012 7:06:02 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Phenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Pyrene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Pyridine	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Surr: 2,4,6-Tribromophenol	90.0	21.3-145		%REC	1	10/23/2012 7:06:02 PM
Surr: 2-Fluorobiphenyl	90.4	20-131		%REC	1	10/23/2012 7:06:02 PM
Surr: 2-Fluorophenol	72.4	11.9-130		%REC	1	10/23/2012 7:06:02 PM
Surr: 4-Terphenyl-d14	96.6	25.1-149		%REC	1	10/23/2012 7:06:02 PM
Surr: Nitrobenzene-d5	92.6	25.6-137		%REC	1	10/23/2012 7:06:02 PM
Surr: Phenol-d5	77.7	20.3-132		%REC	1	10/23/2012 7:06:02 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00184	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Toluene	0.00869	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Ethylbenzene	0.00259	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Xylenes, Total	0.00953	0.00212		mg/Kg	1	10/18/2012 3:22:14 PM
Methyl tert-butyl ether (MTBE)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2,4-Trimethylbenzene	0.00524	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,3,5-Trimethylbenzene	0.00196	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dichloroethane (EDC)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dibromoethane (EDB)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Naphthalene	ND	0.00212		mg/Kg	1	10/18/2012 3:22:14 PM
1-Methylnaphthalene	ND	0.00425		mg/Kg	1	10/18/2012 3:22:14 PM
2-Methylnaphthalene	ND	0.00425		mg/Kg	1	10/18/2012 3:22:14 PM
Acetone	0.0654	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
Bromobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Bromodichloromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Bromoform	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Bromomethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
2-Butanone	ND	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
Carbon tetrachloride	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Chlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Chloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-34 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 4:30:00 PM
Lab ID: 1210856-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Chloromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
2-Chlorotoluene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Carbon disulfide	ND	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
4-Chlorotoluene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
cis-1,2-DCE	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
cis-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dibromo-3-chloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Dibromochloromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Dibromomethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,3-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,4-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Dichlorodifluoromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1-Dichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1-Dichloroethene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,3-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
2,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Hexachlorobutadiene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Isopropylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
4-Isopropyltoluene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Methylene chloride	ND	0.00318		mg/Kg	1	10/18/2012 3:22:14 PM
n-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
2-Hexanone	ND	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
n-Propylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
sec-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Styrene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
4-Methyl-2-pentanone	ND	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
tert-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1,1,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1,2,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Tetrachloroethene (PCE)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
trans-1,2-DCE	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
trans-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2,3-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2,4-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1,1-Trichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1,2-Trichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Trichloroethene (TCE)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Trichlorofluoromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-34 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 4:30:00 PM
Lab ID: 1210856-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Vinyl chloride	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	1	10/18/2012 3:22:14 PM
Surr: 4-Bromofluorobenzene	129	70-130		%REC	1	10/18/2012 3:22:14 PM
Surr: Dibromofluoromethane	99.7	70-130		%REC	1	10/18/2012 3:22:14 PM
Surr: Toluene-d8	93.7	70-130		%REC	1	10/18/2012 3:22:14 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-36 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 5:00:00 PM
Lab ID: 1210856-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	56	9.6		mg/Kg	1	10/21/2012 3:51:46 PM
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	10/21/2012 3:51:46 PM
Surr: DNOP	112	77.6-140		%REC	1	10/21/2012 3:51:46 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 12:33:35 AM
Surr: BFB	91.0	84-116		%REC	1	10/25/2012 12:33:35 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.20	0.033		mg/kg	1	10/23/2012 6:44:46 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
Barium	690	2.0		mg/Kg	20	10/25/2012 2:04:20 PM
Beryllium	0.66	0.30		mg/Kg	2	10/25/2012 12:14:48 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 12:14:48 PM
Chromium	21	0.60		mg/Kg	2	10/25/2012 12:14:48 PM
Cobalt	4.3	0.60		mg/Kg	2	10/25/2012 12:14:48 PM
Iron	16000	500		mg/Kg	500	11/2/2012 7:06:02 AM
Lead	6.8	0.50		mg/Kg	2	10/25/2012 12:14:48 PM
Manganese	580	2.0		mg/Kg	20	10/25/2012 2:04:20 PM
Nickel	12	1.0		mg/Kg	2	10/25/2012 12:14:48 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
Silver	ND	0.50		mg/Kg	2	10/29/2012 3:57:34 PM
Vanadium	20	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
Zinc	50	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Aniline	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Anthracene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Azobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-36 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 5:00:00 PM
Lab ID: 1210856-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Carbazole	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/23/2012 7:35:28 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Chrysene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/23/2012 7:35:28 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/23/2012 7:35:28 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Fluorene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Isophorone	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Naphthalene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-36 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 5:00:00 PM
Lab ID: 1210856-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/23/2012 7:35:28 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Phenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Pyrene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Pyridine	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Surr: 2,4,6-Tribromophenol	99.4	21.3-145		%REC	1	10/23/2012 7:35:28 PM
Surr: 2-Fluorobiphenyl	93.4	20-131		%REC	1	10/23/2012 7:35:28 PM
Surr: 2-Fluorophenol	84.2	11.9-130		%REC	1	10/23/2012 7:35:28 PM
Surr: 4-Terphenyl-d14	114	25.1-149		%REC	1	10/23/2012 7:35:28 PM
Surr: Nitrobenzene-d5	92.8	25.6-137		%REC	1	10/23/2012 7:35:28 PM
Surr: Phenol-d5	92.1	20.3-132		%REC	1	10/23/2012 7:35:28 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00251	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Toluene	0.00652	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Ethylbenzene	0.00147	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Xylenes, Total	0.00610	0.00189		mg/Kg	1	10/19/2012 12:06:15 PM
Methyl tert-butyl ether (MTBE)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2,4-Trimethylbenzene	0.00313	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,3,5-Trimethylbenzene	0.00115	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dichloroethane (EDC)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dibromoethane (EDB)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Naphthalene	ND	0.00189		mg/Kg	1	10/19/2012 12:06:15 PM
1-Methylnaphthalene	ND	0.00378		mg/Kg	1	10/19/2012 12:06:15 PM
2-Methylnaphthalene	ND	0.00378		mg/Kg	1	10/19/2012 12:06:15 PM
Acetone	0.0535	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
Bromobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Bromodichloromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Bromoform	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Bromomethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
2-Butanone	ND	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
Carbon tetrachloride	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Chlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Chloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-36 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 5:00:00 PM
Lab ID: 1210856-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Chloromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
2-Chlorotoluene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Carbon disulfide	ND	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
4-Chlorotoluene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
cis-1,2-DCE	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
cis-1,3-Dichloropropene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dibromo-3-chloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Dibromochloromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Dibromomethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,3-Dichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,4-Dichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Dichlorodifluoromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1-Dichloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1-Dichloroethene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dichloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,3-Dichloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
2,2-Dichloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1-Dichloropropene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Hexachlorobutadiene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Isopropylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
4-Isopropyltoluene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Methylene chloride	ND	0.00284		mg/Kg	1	10/19/2012 12:06:15 PM
n-Butylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
2-Hexanone	ND	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
n-Propylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
sec-Butylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Styrene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
4-Methyl-2-pentanone	ND	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
tert-Butylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1,1,2-Tetrachloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1,2,2-Tetrachloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Tetrachloroethene (PCE)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
trans-1,2-DCE	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
trans-1,3-Dichloropropene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2,3-Trichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2,4-Trichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1,1-Trichloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1,2-Trichloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Trichloroethene (TCE)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Trichlorofluoromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-36 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 5:00:00 PM
Lab ID: 1210856-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Vinyl chloride	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%REC	1	10/19/2012 12:06:15 PM
Surr: 4-Bromofluorobenzene	133	70-130	S	%REC	1	10/19/2012 12:06:15 PM
Surr: Dibromofluoromethane	107	70-130		%REC	1	10/19/2012 12:06:15 PM
Surr: Toluene-d8	107	70-130		%REC	1	10/19/2012 12:06:15 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019045
Project Name: 1210856

Analytical Results Report

Sample Number 121019045-001 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210856-001D / SWMU 1-31 (0-0.5) **Sampling Time** 3:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.256	mg/Kg	0.252	10/30/2012	CRW	EPA 335.4	
%moisture	1.4	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019045-002 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210856-002D / SWMU 1-32 (0-0.5) **Sampling Time** 3:40 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.247	10/30/2012	CRW	EPA 335.4	
%moisture	1	Percent		10/30/2012	TGT	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019045
Project Name: 1210856

Analytical Results Report

Sample Number	121019045-003	**Sampling Date**	10/16/2012	**Date/Time Received**	10/19/2012 1:14 PM
Client Sample ID	1210856-003D / SWMU 1-32 (0-0.5) DUP	**Sampling Time**	3:40 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.253	10/30/2012	CRW	EPA 335.4	
%moisture	1.5	Percent		10/30/2012	TGT	%moisture	

Sample Number	121019045-004	**Sampling Date**	10/16/2012	**Date/Time Received**	10/19/2012 1:14 PM
Client Sample ID	1210856-004D / SWMU 1-33 (0-0.5)	**Sampling Time**	4:03 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.243	10/30/2012	CRW	EPA 335.4	
%moisture	2.2	Percent		10/30/2012	TGT	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019045
Project Name: 1210856

Analytical Results Report

Sample Number 121019045-005 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210856-005D / SWMU 1-34 (0-0.5) **Sampling Time** 4:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.251	10/30/2012	CRW	EPA 335.4	
%moisture	1.6	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019045-006 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210856-006D / SWMU 1-36 (0-0.5) **Sampling Time** 5:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.663	mg/Kg	0.255	10/30/2012	CRW	EPA 335.4	
%moisture	1.5	Percent		10/30/2012	TGT	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4369** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4369** RunNo: **6325**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182210** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		102	77.6	140			

Sample ID **LCS-4369** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4369** RunNo: **6325**
Prep Date: **10/17/2012** Analysis Date: **10/18/2012** SeqNo: **182211** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.6	77.6	140			

Sample ID **MB-4397** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4397** RunNo: **6325**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182283** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID **LCS-4397** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4397** RunNo: **6325**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182284** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	111	52.6	130			
Surr: DNOP	4.3		5.000		86.9	77.6	140			

Sample ID **MB-4404** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182984** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.6	77.6	140			

Sample ID **LCS-4404** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182985** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210819-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8015B: Diesel Range Organics**				
Client ID:	**BatchQC**	Batch ID:	**4404**	RunNo:	**6356**				
Prep Date:	**10/18/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183001**	Units:	**%REC**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID	**1210819-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015B: Diesel Range Organics**				
Client ID:	**BatchQC**	Batch ID:	**4404**	RunNo:	**6356**				
Prep Date:	**10/18/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183002**	Units:	**%REC**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		91.7	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.5	74	117			
Surr: BFB	930		1000		93.1	84	116			

Sample ID **1210811-011BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186249** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	5.0	15.90	0	110	70	130	12.7	22.1	
Surr: BFB	590		636.0		93.2	84	116	0	0	

Sample ID **1210811-011BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6457** RunNo: **6487**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187647** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.91	0	96.6	70	130			
Surr: BFB	650		636.4		102	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4393**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4393**	RunNo: **6360**			
Prep Date: **10/18/2012**	Analysis Date: **10/18/2012**	SeqNo: **182928**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4393** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4393** RunNo: **6360**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182928** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	46.1		50.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	44.8		50.00		89.6	70	130			
Surr: Dibromofluoromethane	53.0		50.00		106	70	130			
Surr: Toluene-d8	42.4		50.00		84.8	70	130			

Sample ID **lcs-4393** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4393** RunNo: **6360**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.87	1.00	10.00	0	88.7	60	140			
Toluene	8.50	1.00	10.00	0	85.0	60	140			
Chlorobenzene	9.38	1.00	10.00	0	93.8	60	140			
1,1-Dichloroethene	11.0	1.00	10.00	0	110	60	140			
Trichloroethene (TCE)	7.70	1.00	10.00	0	77.0	60	140			
Surr: 1,2-Dichloroethane-d4	44.9		50.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	40.9		50.00		81.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4393**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4393**	RunNo:	**6360**
Prep Date:	**10/18/2012**	Analysis Date:	**10/18/2012**	SeqNo:	**182930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	50.4		50.00		101	70	130			
Surr: Toluene-d8	41.1		50.00		82.2	70	130			

Sample ID	**mb-4419**	SampType:	**MBLK**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**PBS**	Batch ID:	**4419**	RunNo:	**6365**
Prep Date:	**10/19/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183060** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4419**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4419**	RunNo: **6365**			
Prep Date: **10/19/2012**	Analysis Date: **10/19/2012**	SeqNo: **183060**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	0.00320	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.7		50.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	43.0		50.00		85.9	70	130			
Surr: Dibromofluoromethane	50.0		50.00		100	70	130			
Surr: Toluene-d8	51.0		50.00		102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4419**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4419**	RunNo:	**6365**
Prep Date:	**10/19/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.7	1.00	12.50	0	93.9	60	140			
Toluene	10.2	1.00	12.50	0	82.0	60	140			
Chlorobenzene	11.9	1.00	12.50	0	94.9	60	140			
1,1-Dichloroethene	14.5	1.00	12.50	0	116	60	140			
Trichloroethene (TCE)	9.39	1.00	12.50	0	75.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.4		50.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	41.6		50.00		83.2	70	130			
Surr: Dibromofluoromethane	46.8		50.00		93.6	70	130			
Surr: Toluene-d8	46.1		50.00		92.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4400**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4400**	RunNo: **6384**			
Prep Date: **10/18/2012**	Analysis Date: **10/21/2012**	SeqNo: **183689**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4400** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/21/2012** SeqNo: **183689** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.0		3.330		89.4	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		94.4	20	131			
Surr: 2-Fluorophenol	2.9		3.330		88.5	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.3	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.1	25.6	137			
Surr: Phenol-d5	3.1		3.330		91.7	20.3	132			

Sample ID **lcs-4400** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/21/2012** SeqNo: **183690** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4400** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/21/2012** SeqNo: **183690** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.20	1.670	0	84.0	49.7	98.1			
4-Chloro-3-methylphenol	2.7	0.50	3.330	0	81.7	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	76.1	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	75.4	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.7	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.6	39.1	86.9			
4-Nitrophenol	2.5	0.25	3.330	0	74.6	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	64.2	36.2	80			
Phenol	2.5	0.20	3.330	0	74.2	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	76.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.4	0.20	1.670	0	85.3	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.6		3.330		109	21.3	145			
Surr: 2-Fluorobiphenyl	1.8		1.670		109	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.8	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		87.1	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		108	25.6	137			
Surr: Phenol-d5	3.2		3.330		95.9	20.3	132			

Sample ID **1210811-002CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/22/2012** SeqNo: **183711** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.673	0	71.4	25.6	142			
4-Chloro-3-methylphenol	2.4	0.50	3.337	0	71.1	63.7	100			
2-Chlorophenol	2.4	0.20	3.337	0	72.7	22.2	126			
1,4-Dichlorobenzene	1.2	0.20	1.673	0	70.8	12.4	115			
2,4-Dinitrotoluene	1.3	0.50	1.673	0	78.0	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.20	1.673	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.25	3.337	0.09450	69.3	36.7	130			
Pentachlorophenol	2.2	0.40	3.337	0	65.2	15.8	113			
Phenol	2.3	0.20	3.337	0	69.9	25.1	124			
Pyrene	1.1	0.20	1.673	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.20	1.673	0	84.8	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.337		89.9	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.673		88.8	20	131			
Surr: 2-Fluorophenol	2.7		3.337		80.1	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.673		76.2	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.673		105	25.6	137			
Surr: Phenol-d5	3.0		3.337		89.7	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210811-002CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4400** RunNo: **6384**
Prep Date: **10/18/2012** Analysis Date: **10/22/2012** SeqNo: **183712** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.674	0	73.4	25.6	142	2.79	22	
4-Chloro-3-methylphenol	2.3	0.50	3.338	0	68.2	63.7	100	3.99	27.3	
2-Chlorophenol	2.4	0.20	3.338	0	71.5	22.2	126	1.58	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.674	0	66.1	12.4	115	6.82	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.674	0	80.4	14.9	142	3.08	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.674	0	75.8	13.9	136	7.08	22.6	
4-Nitrophenol	2.5	0.25	3.338	0.09450	73.3	36.7	130	5.48	20	
Pentachlorophenol	2.1	0.40	3.338	0	62.8	15.8	113	3.74	27.1	
Phenol	2.1	0.20	3.338	0	64.0	25.1	124	8.86	32.2	
Pyrene	1.2	0.20	1.674	0	71.6	35.8	124	4.33	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.674	0	81.2	30	113	4.27	27.8	
Surr: 2,4,6-Tribromophenol	2.8		3.338		83.7	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.674		90.7	20	131	0	0	
Surr: 2-Fluorophenol	2.6		3.338		79.2	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.674		76.3	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.674		96.8	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.338		85.8	20.3	132	0	0	

Sample ID **lcs-4422** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185414** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	74.7	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	76.9	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	75.3	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.0	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	79.3	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.1	39.1	86.9			
4-Nitrophenol	2.4	0.25	3.330	0	73.5	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	61.6	36.2	80			
Phenol	2.4	0.20	3.330	0	72.5	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.5	0.20	1.670	0	91.6	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		103	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		95.5	20	131			
Surr: 2-Fluorophenol	2.8		3.330		83.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.6	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.9	25.6	137			
Surr: Phenol-d5	3.0		3.330		89.0	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4422**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4422**	RunNo: **6445**			
Prep Date: **10/19/2012**	Analysis Date: **10/23/2012**	SeqNo: **185416**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4422** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.9		3.330		117	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		98.4	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.6	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		109	25.6	137			
Surr: Phenol-d5	3.2		3.330		96.3	20.3	132			

Sample ID **1210858-004Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210858-004Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.659	0	69.3	25.6	142			
4-Chloro-3-methylphenol	2.2	0.50	3.309	0	67.6	63.7	100			
2-Chlorophenol	2.0	0.20	3.309	0	61.7	22.2	126			
1,4-Dichlorobenzene	1.1	0.20	1.659	0	63.6	12.4	115			
2,4-Dinitrotoluene	1.2	0.50	1.659	0	74.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	0.20	1.659	0	65.9	13.9	136			
4-Nitrophenol	2.2	0.25	3.309	0.09121	63.6	36.7	130			
Pentachlorophenol	1.9	0.40	3.309	0	56.5	15.8	113			
Phenol	2.1	0.20	3.309	0	63.9	25.1	124			
Pyrene	1.1	0.20	1.659	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.3	0.20	1.659	0	78.0	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.309		90.3	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.659		90.0	20	131			
Surr: 2-Fluorophenol	2.5		3.309		74.2	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		80.0	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.659		101	25.6	137			
Surr: Phenol-d5	2.8		3.309		84.0	20.3	132			

Sample ID **1210858-004Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185434** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.681	0	71.3	25.6	142	4.05	22	
4-Chloro-3-methylphenol	2.3	0.50	3.351	0	69.5	63.7	100	4.10	27.3	
2-Chlorophenol	2.3	0.20	3.351	0	68.2	22.2	126	11.4	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.681	0	63.4	12.4	115	1.02	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.681	0	77.0	14.9	142	4.43	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.681	0	75.9	13.9	136	15.3	22.6	
4-Nitrophenol	2.3	0.25	3.351	0.09121	64.9	36.7	130	3.21	20	
Pentachlorophenol	2.0	0.40	3.351	0	59.9	15.8	113	7.18	27.1	
Phenol	2.2	0.20	3.351	0	66.5	25.1	124	5.18	32.2	
Pyrene	1.2	0.20	1.681	0	70.8	35.8	124	4.36	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.681	0	80.5	30	113	4.34	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.351		93.6	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.681		91.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.351		75.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.681		81.4	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.681		96.9	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.351		85.9	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4426** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185363** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4426** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185364** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID **1210859-002CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185391** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1654	0.01134	102	75	125			

Sample ID **1210859-002CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185392** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1685	0.01134	99.0	75	125	1.06	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4440** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186820** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	0.64	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4440** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186821** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0.6605	96.6	80	120			
Arsenic	25	2.5	25.00	0	102	80	120			
Barium	25	0.10	25.00	0	98.6	80	120			
Beryllium	26	0.15	25.00	0	103	80	120			
Cadmium	25	0.10	25.00	0	98.8	80	120			
Chromium	25	0.30	25.00	0	99.0	80	120			
Cobalt	24	0.30	25.00	0	95.6	80	120			
Lead	24	0.25	25.00	0	96.6	80	120			
Manganese	24	0.10	25.00	0.05400	96.6	80	120			
Nickel	24	0.50	25.00	0	94.2	80	120			
Selenium	24	2.5	25.00	0	94.1	80	120			
Silver	6.0	0.25	5.000	0.6425	106	80	120			B
Vanadium	25	2.5	25.00	0	102	80	120			
Zinc	24	2.5	25.00	0	97.3	80	120			

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.93	2.265	83.0	75	125			
Cadmium	20	0.10	24.93	0.03505	80.0	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	25	0.30	24.93	3.270	86.6	75	125			
Selenium	17	2.5	24.93	0	68.1	75	125			S

Sample ID **1210771-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186849** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.96	2.265	81.7	75	125	1.34	20	
Cadmium	19	0.10	24.96	0.03505	77.2	75	125	3.39	20	
Chromium	24	0.30	24.96	3.270	84.2	75	125	2.39	20	
Selenium	15	2.5	24.96	0	61.4	75	125	10.1	20	S

Sample ID **MB-4440** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188992** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID **LCS-4440** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188993** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.7	0.25	5.000	0	113	80	120			

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **189043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.3	0.25	4.987	0	85.5	75	125			

Sample ID **1210771-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **189044** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.0	0.25	4.992	0	80.9	75	125	5.39	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210856**
21-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**MB-4440**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**PBS**	Batch ID:	**4440**	RunNo:	**6670**				
Prep Date:	**10/22/2012**	Analysis Date:	**11/2/2012**	SeqNo:	**192431**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	**LCS-4440**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**LCSS**	Batch ID:	**4440**	RunNo:	**6670**				
Prep Date:	**10/22/2012**	Analysis Date:	**11/2/2012**	SeqNo:	**192432**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	109	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210856

Received by/date: 10/18/12

Logged By: **Michelle Garcia** 10/18/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/18/2012 8:42:47 AM Michelle Garcia

Reviewed By: 10/18/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH – RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH – RPS
Sampler: TRACY PAYNE – RPS
On Ice: ☒ Yes ☐ No
Sample Temperature 1.0

HEAL No. 1210856

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10-16-12	1500	SOIL	SWMU 1-31 (0-0.5)	2 VIALS	SOBI	-001										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1540		SWMU 1-32 (0-0.5)	2 VIALS	SOBI	-002										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1540		SWMU 1-32 (0-0.5) DUP	2 VIALS	SOBI	-003										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1603		SWMU 1-33 (0-0.5)	2 VIALS	SOBI	-004										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date Time	Remarks:
10/17/12	0751	[signature]	[signature]	10/18/12 0800	
Date:	Time:	Relinquished by:	Received by:	Date Time	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name:
Project #: SWMU No. 1
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210856	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/16/12	1630	SOIL	SWMU 1-34(0-0.5')	2 VIALS	SOBI	-005										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1700		SWMU 1-36(0-0.5')	2 VIALS	SOBI	-006										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/17/12	0751	[signature]	[signature]	10/18/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 13, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210858

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:00:00 AM
Lab ID: 1210858-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 1:57:12 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2012 1:57:12 PM
Surr: DNOP	96.0	77.6-140		%REC	1	10/19/2012 1:57:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 1:59:36 AM
Surr: BFB	90.4	84-116		%REC	1	10/25/2012 1:59:36 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:46:33 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
Barium	700	2.0		mg/Kg	20	10/25/2012 4:53:22 PM
Beryllium	0.35	0.30		mg/Kg	2	10/25/2012 4:50:20 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 4:50:20 PM
Chromium	3.4	0.60		mg/Kg	2	10/25/2012 4:50:20 PM
Cobalt	1.9	0.60		mg/Kg	2	10/25/2012 4:50:20 PM
Iron	3600	500		mg/Kg	500	10/25/2012 4:56:13 PM
Lead	ND	0.50		mg/Kg	2	10/25/2012 4:50:20 PM
Manganese	300	2.0		mg/Kg	20	10/25/2012 4:53:22 PM
Nickel	3.6	1.0		mg/Kg	2	10/25/2012 4:50:20 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 4:50:20 PM
Vanadium	11	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
Zinc	11	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Aniline	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Azobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:00:00 AM
Lab ID: 1210858-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Carbazole	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/23/2012 8:04:59 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Chrysene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/23/2012 8:04:59 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/23/2012 8:04:59 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Fluorene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Isophorone	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Naphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:00:00 AM
Lab ID: 1210858-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/23/2012 8:04:59 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Phenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Pyridine	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Surr: 2,4,6-Tribromophenol	66.5	21.3-145		%REC	1	10/23/2012 8:04:59 PM
Surr: 2-Fluorobiphenyl	67.0	20-131		%REC	1	10/23/2012 8:04:59 PM
Surr: 2-Fluorophenol	60.4	11.9-130		%REC	1	10/23/2012 8:04:59 PM
Surr: 4-Terphenyl-d14	62.7	25.1-149		%REC	1	10/23/2012 8:04:59 PM
Surr: Nitrobenzene-d5	71.7	25.6-137		%REC	1	10/23/2012 8:04:59 PM
Surr: Phenol-d5	68.7	20.3-132		%REC	1	10/23/2012 8:04:59 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00109	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Toluene	0.00687	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Ethylbenzene	0.00386	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Xylenes, Total	0.0210	0.00144		mg/Kg	1	10/19/2012 12:37:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2,4-Trimethylbenzene	0.00455	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,3,5-Trimethylbenzene	0.00192	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dichloroethane (EDC)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dibromoethane (EDB)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Naphthalene	ND	0.00144		mg/Kg	1	10/19/2012 12:37:00 PM
1-Methylnaphthalene	ND	0.00288		mg/Kg	1	10/19/2012 12:37:00 PM
2-Methylnaphthalene	ND	0.00288		mg/Kg	1	10/19/2012 12:37:00 PM
Acetone	0.148	0.00719	E	mg/Kg	1	10/19/2012 12:37:00 PM
Bromobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Bromodichloromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Bromoform	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Bromomethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
2-Butanone	ND	0.00719		mg/Kg	1	10/19/2012 12:37:00 PM
Carbon tetrachloride	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Chlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Chloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:00:00 AM
Lab ID: 1210858-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Chloromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
2-Chlorotoluene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Carbon disulfide	ND	0.00719		mg/Kg	1	10/19/2012 12:37:00 PM
4-Chlorotoluene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
cis-1,2-DCE	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
cis-1,3-Dichloropropene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dibromo-3-chloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Dibromochloromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Dibromomethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,3-Dichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,4-Dichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Dichlorodifluoromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1-Dichloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1-Dichloroethene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dichloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,3-Dichloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
2,2-Dichloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1-Dichloropropene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Hexachlorobutadiene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Isopropylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
4-Isopropyltoluene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Methylene chloride	ND	0.00216		mg/Kg	1	10/19/2012 12:37:00 PM
n-Butylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
2-Hexanone	ND	0.00719		mg/Kg	1	10/19/2012 12:37:00 PM
n-Propylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
sec-Butylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Styrene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
4-Methyl-2-pentanone	ND	0.00719		mg/Kg	1	10/19/2012 12:37:00 PM
tert-Butylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1,1,2-Tetrachloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1,2,2-Tetrachloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Tetrachloroethene (PCE)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
trans-1,2-DCE	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
trans-1,3-Dichloropropene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2,3-Trichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2,4-Trichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1,1-Trichloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1,2-Trichloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Trichloroethene (TCE)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Trichlorofluoromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:00:00 AM
Lab ID: 1210858-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Vinyl chloride	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Surr: 1,2-Dichloroethane-d4	86.5	70-130		%REC	1	10/19/2012 12:37:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%REC	1	10/19/2012 12:37:00 PM
Surr: Dibromofluoromethane	97.8	70-130		%REC	1	10/19/2012 12:37:00 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/19/2012 12:37:00 PM

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:10:00 AM
Lab ID: 1210858-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 2:22:14 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2012 2:22:14 PM
Surr: DNOP	92.8	77.6-140		%REC	1	10/19/2012 2:22:14 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 2:28:14 AM
Surr: BFB	89.9	84-116		%REC	1	10/25/2012 2:28:14 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:48:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	12		mg/Kg	5	10/29/2012 4:05:34 PM
Arsenic	ND	12		mg/Kg	5	10/29/2012 4:05:34 PM
Barium	340	2.0		mg/Kg	20	10/25/2012 5:06:32 PM
Beryllium	ND	0.75		mg/Kg	5	10/29/2012 4:05:34 PM
Cadmium	ND	0.50		mg/Kg	5	10/29/2012 4:05:34 PM
Chromium	9.2	1.5		mg/Kg	5	10/29/2012 4:05:34 PM
Cobalt	3.8	1.5		mg/Kg	5	10/29/2012 4:05:34 PM
Iron	11000	500		mg/Kg	500	10/25/2012 5:20:33 PM
Lead	6.1	1.2		mg/Kg	5	10/29/2012 4:05:34 PM
Manganese	1500	5.0		mg/Kg	50	10/29/2012 4:18:19 PM
Nickel	6.4	2.5		mg/Kg	5	10/29/2012 4:05:34 PM
Selenium	ND	12		mg/Kg	5	10/29/2012 4:05:34 PM
Silver	ND	1.2		mg/Kg	5	10/29/2012 4:05:34 PM
Vanadium	20	12		mg/Kg	5	10/29/2012 4:05:34 PM
Zinc	15	12		mg/Kg	5	10/29/2012 4:05:34 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Aniline	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Azobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:10:00 AM
Lab ID: 1210858-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Carbazole	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/23/2012 8:34:29 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Chrysene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/23/2012 8:34:29 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/23/2012 8:34:29 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Fluorene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Isophorone	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Naphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:10:00 AM
Lab ID: 1210858-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/23/2012 8:34:29 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Phenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Pyridine	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Surr: 2,4,6-Tribromophenol	77.5	21.3-145		%REC	1	10/23/2012 8:34:29 PM
Surr: 2-Fluorobiphenyl	80.3	20-131		%REC	1	10/23/2012 8:34:29 PM
Surr: 2-Fluorophenol	73.9	11.9-130		%REC	1	10/23/2012 8:34:29 PM
Surr: 4-Terphenyl-d14	71.0	25.1-149		%REC	1	10/23/2012 8:34:29 PM
Surr: Nitrobenzene-d5	82.0	25.6-137		%REC	1	10/23/2012 8:34:29 PM
Surr: Phenol-d5	78.3	20.3-132		%REC	1	10/23/2012 8:34:29 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00160	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Toluene	0.00190	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Ethylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Xylenes, Total	0.00154	0.00149		mg/Kg	1	10/18/2012 4:54:54 PM
Methyl tert-butyl ether (MTBE)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2,4-Trimethylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,3,5-Trimethylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dichloroethane (EDC)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dibromoethane (EDB)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Naphthalene	ND	0.00149		mg/Kg	1	10/18/2012 4:54:54 PM
1-Methylnaphthalene	ND	0.00299		mg/Kg	1	10/18/2012 4:54:54 PM
2-Methylnaphthalene	ND	0.00299		mg/Kg	1	10/18/2012 4:54:54 PM
Acetone	0.0512	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
Bromobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Bromodichloromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Bromoform	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Bromomethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
2-Butanone	ND	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
Carbon tetrachloride	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Chlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Chloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:10:00 AM
Lab ID: 1210858-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Chloromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
2-Chlorotoluene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Carbon disulfide	ND	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
4-Chlorotoluene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
cis-1,2-DCE	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
cis-1,3-Dichloropropene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dibromo-3-chloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Dibromochloromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Dibromomethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,3-Dichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,4-Dichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Dichlorodifluoromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1-Dichloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1-Dichloroethene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dichloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,3-Dichloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
2,2-Dichloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1-Dichloropropene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Hexachlorobutadiene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Isopropylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
4-Isopropyltoluene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Methylene chloride	ND	0.00224		mg/Kg	1	10/18/2012 4:54:54 PM
n-Butylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
2-Hexanone	ND	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
n-Propylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
sec-Butylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Styrene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
4-Methyl-2-pentanone	ND	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
tert-Butylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1,1,2-Tetrachloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1,2,2-Tetrachloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Tetrachloroethene (PCE)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
trans-1,2-DCE	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
trans-1,3-Dichloropropene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2,3-Trichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2,4-Trichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1,1-Trichloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1,2-Trichloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Trichloroethene (TCE)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Trichlorofluoromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-18 (1-1.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:10:00 AM
Lab ID: 1210858-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Vinyl chloride	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Surr: 1,2-Dichloroethane-d4	86.8	70-130		%REC	1	10/18/2012 4:54:54 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/18/2012 4:54:54 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/18/2012 4:54:54 PM
Surr: Toluene-d8	97.2	70-130		%REC	1	10/18/2012 4:54:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-19 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:35:00 AM
Lab ID: 1210858-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 6:14:50 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/21/2012 6:14:50 AM
Surr: DNOP	104	77.6-140		%REC	1	10/21/2012 6:14:50 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 2:57:02 AM
Surr: BFB	89.7	84-116		%REC	1	10/25/2012 2:57:02 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.056	0.033		mg/kg	1	10/23/2012 6:50:07 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
Barium	530	2.0		mg/Kg	20	10/25/2012 5:29:06 PM
Beryllium	0.68	0.30		mg/Kg	2	10/25/2012 5:26:14 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 5:26:14 PM
Chromium	13	0.60		mg/Kg	2	10/25/2012 5:26:14 PM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 5:26:14 PM
Iron	13000	500		mg/Kg	500	10/25/2012 5:31:45 PM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 5:26:14 PM
Manganese	550	2.0		mg/Kg	20	10/25/2012 5:29:06 PM
Nickel	6.5	1.0		mg/Kg	2	10/25/2012 5:26:14 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
Silver	ND	1.2		mg/Kg	5	10/31/2012 1:29:43 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
Zinc	25	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Aniline	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Anthracene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Azobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-19 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:35:00 AM
Lab ID: 1210858-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Carbazole	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/23/2012 9:03:58 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Chrysene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/23/2012 9:03:58 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/23/2012 9:03:58 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Fluorene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Isophorone	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Naphthalene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-19 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:35:00 AM
Lab ID: 1210858-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/23/2012 9:03:58 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Phenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Pyrene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Pyridine	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Surr: 2,4,6-Tribromophenol	80.0	21.3-145		%REC	1	10/23/2012 9:03:58 PM
Surr: 2-Fluorobiphenyl	88.3	20-131		%REC	1	10/23/2012 9:03:58 PM
Surr: 2-Fluorophenol	82.3	11.9-130		%REC	1	10/23/2012 9:03:58 PM
Surr: 4-Terphenyl-d14	75.6	25.1-149		%REC	1	10/23/2012 9:03:58 PM
Surr: Nitrobenzene-d5	91.0	25.6-137		%REC	1	10/23/2012 9:03:58 PM
Surr: Phenol-d5	85.5	20.3-132		%REC	1	10/23/2012 9:03:58 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00225	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Toluene	0.00290	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Ethylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Xylenes, Total	ND	0.00193		mg/Kg	1	10/18/2012 5:25:43 PM
Methyl tert-butyl ether (MTBE)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2,4-Trimethylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,3,5-Trimethylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dichloroethane (EDC)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dibromoethane (EDB)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Naphthalene	ND	0.00193		mg/Kg	1	10/18/2012 5:25:43 PM
1-Methylnaphthalene	ND	0.00386		mg/Kg	1	10/18/2012 5:25:43 PM
2-Methylnaphthalene	ND	0.00386		mg/Kg	1	10/18/2012 5:25:43 PM
Acetone	0.0988	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
Bromobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Bromodichloromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Bromoform	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Bromomethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
2-Butanone	ND	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
Carbon tetrachloride	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Chlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Chloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-19 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:35:00 AM
Lab ID: 1210858-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Chloromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
2-Chlorotoluene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Carbon disulfide	ND	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
4-Chlorotoluene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
cis-1,2-DCE	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
cis-1,3-Dichloropropene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dibromo-3-chloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Dibromochloromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Dibromomethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,3-Dichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,4-Dichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Dichlorodifluoromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1-Dichloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1-Dichloroethene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dichloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,3-Dichloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
2,2-Dichloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1-Dichloropropene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Hexachlorobutadiene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Isopropylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
4-Isopropyltoluene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Methylene chloride	ND	0.00290		mg/Kg	1	10/18/2012 5:25:43 PM
n-Butylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
2-Hexanone	ND	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
n-Propylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
sec-Butylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Styrene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
4-Methyl-2-pentanone	ND	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
tert-Butylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1,1,2-Tetrachloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1,2,2-Tetrachloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Tetrachloroethene (PCE)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
trans-1,2-DCE	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
trans-1,3-Dichloropropene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2,3-Trichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2,4-Trichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1,1-Trichloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1,2-Trichloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Trichloroethene (TCE)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Trichlorofluoromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-19 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 10:35:00 AM
Lab ID: 1210858-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Vinyl chloride	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%REC	1	10/18/2012 5:25:43 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/18/2012 5:25:43 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/18/2012 5:25:43 PM
Surr: Toluene-d8	94.1	70-130		%REC	1	10/18/2012 5:25:43 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-21 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:05:00 AM
Lab ID: 1210858-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 11:44:48 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/19/2012 11:44:48 AM
Surr: DNOP	96.8	77.6-140		%REC	1	10/19/2012 11:44:48 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 3:25:48 AM
Surr: BFB	89.2	84-116		%REC	1	10/25/2012 3:25:48 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:51:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
Barium	440	2.0		mg/Kg	20	10/25/2012 5:42:05 PM
Beryllium	0.77	0.30		mg/Kg	2	10/25/2012 5:39:12 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 5:39:12 PM
Chromium	9.9	0.60		mg/Kg	2	10/25/2012 5:39:12 PM
Cobalt	4.1	0.60		mg/Kg	2	10/25/2012 5:39:12 PM
Iron	14000	500		mg/Kg	500	10/25/2012 5:44:46 PM
Lead	2.6	0.50		mg/Kg	2	10/25/2012 5:39:12 PM
Manganese	450	2.0		mg/Kg	20	10/25/2012 5:42:05 PM
Nickel	7.5	1.0		mg/Kg	2	10/25/2012 5:39:12 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:44:15 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
Zinc	17	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Aniline	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Anthracene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Azobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-21 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:05:00 AM
Lab ID: 1210858-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Carbazole	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/23/2012 9:33:26 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Chrysene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/23/2012 9:33:26 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/23/2012 9:33:26 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Fluorene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Isophorone	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Naphthalene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-21 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:05:00 AM
Lab ID: 1210858-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/23/2012 9:33:26 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Phenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Pyrene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Pyridine	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Surr: 2,4,6-Tribromophenol	77.7	21.3-145		%REC	1	10/23/2012 9:33:26 PM
Surr: 2-Fluorobiphenyl	77.7	20-131		%REC	1	10/23/2012 9:33:26 PM
Surr: 2-Fluorophenol	75.5	11.9-130		%REC	1	10/23/2012 9:33:26 PM
Surr: 4-Terphenyl-d14	74.2	25.1-149		%REC	1	10/23/2012 9:33:26 PM
Surr: Nitrobenzene-d5	89.9	25.6-137		%REC	1	10/23/2012 9:33:26 PM
Surr: Phenol-d5	82.2	20.3-132		%REC	1	10/23/2012 9:33:26 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00183	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Toluene	0.00147	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Xylenes, Total	ND	0.00208		mg/Kg	1	10/18/2012 5:56:28 PM
Methyl tert-butyl ether (MTBE)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Naphthalene	ND	0.00208		mg/Kg	1	10/18/2012 5:56:28 PM
1-Methylnaphthalene	ND	0.00416		mg/Kg	1	10/18/2012 5:56:28 PM
2-Methylnaphthalene	ND	0.00416		mg/Kg	1	10/18/2012 5:56:28 PM
Acetone	0.0144	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
Bromobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Bromoform	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Bromomethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
2-Butanone	ND	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Chloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM

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Hall Environmental Analysis Laboratory, Inc.

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Lab ID: 1210858-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Chloromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Dibromomethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Methylene chloride	ND	0.00312		mg/Kg	1	10/18/2012 5:56:28 PM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
2-Hexanone	ND	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Styrene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-21 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:05:00 AM
Lab ID: 1210858-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Surr: 1,2-Dichloroethane-d4	86.1	70-130		%REC	1	10/18/2012 5:56:28 PM
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	1	10/18/2012 5:56:28 PM
Surr: Dibromofluoromethane	93.5	70-130		%REC	1	10/18/2012 5:56:28 PM
Surr: Toluene-d8	97.5	70-130		%REC	1	10/18/2012 5:56:28 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-21 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/16/2012 11:05:00 AM
Lab ID: 1210858-005 **Matrix:** SOIL **Received Date:** 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 12:09:39 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/19/2012 12:09:39 PM
Surr: DNOP	95.2	77.6-140		%REC	1	10/19/2012 12:09:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 3:54:32 AM
Surr: BFB	89.3	84-116		%REC	1	10/25/2012 3:54:32 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:53:47 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
Barium	290	2.0		mg/Kg	20	10/25/2012 6:03:57 PM
Beryllium	0.89	0.30		mg/Kg	2	10/25/2012 6:01:03 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 6:01:03 PM
Chromium	11	0.60		mg/Kg	2	10/25/2012 6:01:03 PM
Cobalt	4.5	0.60		mg/Kg	2	10/25/2012 6:01:03 PM
Iron	17000	500		mg/Kg	500	10/31/2012 1:51:45 PM
Lead	2.3	0.50		mg/Kg	2	10/25/2012 6:01:03 PM
Manganese	470	2.0		mg/Kg	20	10/25/2012 6:03:57 PM
Nickel	8.4	1.0		mg/Kg	2	10/25/2012 6:01:03 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:47:07 PM
Vanadium	22	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
Zinc	18	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Aniline	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Anthracene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Azobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-21 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/16/2012 11:05:00 AM
Lab ID: 1210858-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Carbazole	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/23/2012 11:01:44 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Chrysene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/23/2012 11:01:44 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/23/2012 11:01:44 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Fluorene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Isophorone	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Naphthalene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM

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Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/23/2012 11:01:44 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Phenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Pyrene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Pyridine	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Surr: 2,4,6-Tribromophenol	76.9	21.3-145		%REC	1	10/23/2012 11:01:44 PM
Surr: 2-Fluorobiphenyl	81.8	20-131		%REC	1	10/23/2012 11:01:44 PM
Surr: 2-Fluorophenol	74.0	11.9-130		%REC	1	10/23/2012 11:01:44 PM
Surr: 4-Terphenyl-d14	72.7	25.1-149		%REC	1	10/23/2012 11:01:44 PM
Surr: Nitrobenzene-d5	87.9	25.6-137		%REC	1	10/23/2012 11:01:44 PM
Surr: Phenol-d5	78.0	20.3-132		%REC	1	10/23/2012 11:01:44 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00178	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Toluene	0.00111	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Ethylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Xylenes, Total	ND	0.00195		mg/Kg	1	10/18/2012 6:27:13 PM
Methyl tert-butyl ether (MTBE)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2,4-Trimethylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,3,5-Trimethylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dichloroethane (EDC)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dibromoethane (EDB)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Naphthalene	ND	0.00195		mg/Kg	1	10/18/2012 6:27:13 PM
1-Methylnaphthalene	ND	0.00390		mg/Kg	1	10/18/2012 6:27:13 PM
2-Methylnaphthalene	ND	0.00390		mg/Kg	1	10/18/2012 6:27:13 PM
Acetone	0.0316	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
Bromobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Bromodichloromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Bromoform	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Bromomethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
2-Butanone	ND	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
Carbon tetrachloride	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Chlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Chloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-21 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/16/2012 11:05:00 AM
Lab ID: 1210858-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Chloromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
2-Chlorotoluene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Carbon disulfide	ND	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
4-Chlorotoluene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
cis-1,2-DCE	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
cis-1,3-Dichloropropene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dibromo-3-chloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Dibromochloromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Dibromomethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,3-Dichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,4-Dichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Dichlorodifluoromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1-Dichloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1-Dichloroethene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dichloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,3-Dichloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
2,2-Dichloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1-Dichloropropene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Hexachlorobutadiene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Isopropylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
4-Isopropyltoluene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Methylene chloride	ND	0.00292		mg/Kg	1	10/18/2012 6:27:13 PM
n-Butylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
2-Hexanone	ND	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
n-Propylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
sec-Butylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Styrene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
4-Methyl-2-pentanone	ND	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
tert-Butylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1,1,2-Tetrachloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1,2,2-Tetrachloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Tetrachloroethene (PCE)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
trans-1,2-DCE	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
trans-1,3-Dichloropropene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2,3-Trichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2,4-Trichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1,1-Trichloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1,2-Trichloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Trichloroethene (TCE)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Trichlorofluoromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-21 (0-0.5') DUP
Project: SWMU NO.1
Collection Date: 10/16/2012 11:05:00 AM
Lab ID: 1210858-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Vinyl chloride	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	10/18/2012 6:27:13 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	10/18/2012 6:27:13 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/18/2012 6:27:13 PM
Surr: Toluene-d8	88.5	70-130		%REC	1	10/18/2012 6:27:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:35:00 AM
Lab ID: 1210858-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 5:25:09 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/21/2012 5:25:09 AM
Surr: DNOP	108	77.6-140		%REC	1	10/21/2012 5:25:09 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 4:23:17 AM
Surr: BFB	91.8	84-116		%REC	1	10/25/2012 4:23:17 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.034	0.033		mg/kg	1	10/23/2012 6:55:35 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
Barium	590	2.0		mg/Kg	20	10/25/2012 6:17:18 PM
Beryllium	0.89	0.30		mg/Kg	2	10/25/2012 6:14:12 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 6:14:12 PM
Chromium	14	0.60		mg/Kg	2	10/25/2012 6:14:12 PM
Cobalt	5.3	0.60		mg/Kg	2	10/25/2012 6:14:12 PM
Iron	22000	500		mg/Kg	500	10/31/2012 1:57:31 PM
Lead	3.5	0.50		mg/Kg	2	10/25/2012 6:14:12 PM
Manganese	530	2.0		mg/Kg	20	10/25/2012 6:17:18 PM
Nickel	8.6	1.0		mg/Kg	2	10/25/2012 6:14:12 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:54:36 PM
Vanadium	27	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
Zinc	26	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Aniline	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Anthracene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Azobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:35:00 AM
Lab ID: 1210858-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Carbazole	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/23/2012 11:31:08 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Chrysene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/23/2012 11:31:08 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/23/2012 11:31:08 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Fluorene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Isophorone	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Naphthalene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:35:00 AM
Lab ID: 1210858-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/23/2012 11:31:08 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Phenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Pyrene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Pyridine	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Surr: 2,4,6-Tribromophenol	51.1	21.3-145		%REC	1	10/23/2012 11:31:08 PM
Surr: 2-Fluorobiphenyl	55.1	20-131		%REC	1	10/23/2012 11:31:08 PM
Surr: 2-Fluorophenol	49.3	11.9-130		%REC	1	10/23/2012 11:31:08 PM
Surr: 4-Terphenyl-d14	55.2	25.1-149		%REC	1	10/23/2012 11:31:08 PM
Surr: Nitrobenzene-d5	56.6	25.6-137		%REC	1	10/23/2012 11:31:08 PM
Surr: Phenol-d5	53.3	20.3-132		%REC	1	10/23/2012 11:31:08 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00183	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Toluene	0.00156	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Ethylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Xylenes, Total	ND	0.00189		mg/Kg	1	10/18/2012 6:58:06 PM
Methyl tert-butyl ether (MTBE)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2,4-Trimethylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,3,5-Trimethylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dichloroethane (EDC)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dibromoethane (EDB)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Naphthalene	ND	0.00189		mg/Kg	1	10/18/2012 6:58:06 PM
1-Methylnaphthalene	ND	0.00377		mg/Kg	1	10/18/2012 6:58:06 PM
2-Methylnaphthalene	ND	0.00377		mg/Kg	1	10/18/2012 6:58:06 PM
Acetone	0.0637	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
Bromobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Bromodichloromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Bromoform	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Bromomethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
2-Butanone	ND	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
Carbon tetrachloride	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Chlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Chloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:35:00 AM
Lab ID: 1210858-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Chloromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
2-Chlorotoluene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Carbon disulfide	ND	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
4-Chlorotoluene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
cis-1,2-DCE	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
cis-1,3-Dichloropropene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dibromo-3-chloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Dibromochloromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Dibromomethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,3-Dichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,4-Dichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Dichlorodifluoromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1-Dichloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1-Dichloroethene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dichloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,3-Dichloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
2,2-Dichloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1-Dichloropropene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Hexachlorobutadiene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Isopropylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
4-Isopropyltoluene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Methylene chloride	ND	0.00283		mg/Kg	1	10/18/2012 6:58:06 PM
n-Butylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
2-Hexanone	ND	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
n-Propylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
sec-Butylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Styrene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
4-Methyl-2-pentanone	ND	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
tert-Butylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1,1,2-Tetrachloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1,2,2-Tetrachloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Tetrachloroethene (PCE)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
trans-1,2-DCE	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
trans-1,3-Dichloropropene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2,3-Trichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2,4-Trichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1,1-Trichloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1,2-Trichloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Trichloroethene (TCE)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Trichlorofluoromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:35:00 AM
Lab ID: 1210858-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Vinyl chloride	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	10/18/2012 6:58:06 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	10/18/2012 6:58:06 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/18/2012 6:58:06 PM
Surr: Toluene-d8	92.2	70-130		%REC	1	10/18/2012 6:58:06 PM

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:45:00 AM
Lab ID: 1210858-007
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/19/2012 12:34:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2012 12:34:28 PM
Surr: DNOP	95.5	77.6-140		%REC	1	10/19/2012 12:34:28 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 4:51:59 AM
Surr: BFB	88.6	84-116		%REC	1	10/25/2012 4:51:59 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:57:23 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
Barium	500	2.0		mg/Kg	20	10/25/2012 6:28:40 PM
Beryllium	0.69	0.30		mg/Kg	2	10/25/2012 6:25:49 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 6:25:49 PM
Chromium	9.8	0.60		mg/Kg	2	10/25/2012 6:25:49 PM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 6:25:49 PM
Iron	14000	500		mg/Kg	500	10/31/2012 2:03:13 PM
Lead	2.4	0.50		mg/Kg	2	10/25/2012 6:25:49 PM
Manganese	330	2.0		mg/Kg	20	10/25/2012 6:28:40 PM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 6:25:49 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:00:20 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
Zinc	15	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Aniline	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Anthracene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Azobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:45:00 AM
Lab ID: 1210858-007
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Carbazole	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/24/2012 12:00:35 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Chrysene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/24/2012 12:00:35 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/24/2012 12:00:35 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Fluorene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Isophorone	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Naphthalene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:45:00 AM
Lab ID: 1210858-007
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/24/2012 12:00:35 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Phenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Pyrene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Pyridine	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Surr: 2,4,6-Tribromophenol	64.0	21.3-145		%REC	1	10/24/2012 12:00:35 AM
Surr: 2-Fluorobiphenyl	60.0	20-131		%REC	1	10/24/2012 12:00:35 AM
Surr: 2-Fluorophenol	53.3	11.9-130		%REC	1	10/24/2012 12:00:35 AM
Surr: 4-Terphenyl-d14	60.2	25.1-149		%REC	1	10/24/2012 12:00:35 AM
Surr: Nitrobenzene-d5	62.0	25.6-137		%REC	1	10/24/2012 12:00:35 AM
Surr: Phenol-d5	58.3	20.3-132		%REC	1	10/24/2012 12:00:35 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00192	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Toluene	0.00129	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Ethylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Xylenes, Total	ND	0.00176		mg/Kg	1	10/18/2012 7:28:54 PM
Methyl tert-butyl ether (MTBE)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2,4-Trimethylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,3,5-Trimethylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dichloroethane (EDC)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dibromoethane (EDB)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Naphthalene	ND	0.00176		mg/Kg	1	10/18/2012 7:28:54 PM
1-Methylnaphthalene	ND	0.00351		mg/Kg	1	10/18/2012 7:28:54 PM
2-Methylnaphthalene	ND	0.00351		mg/Kg	1	10/18/2012 7:28:54 PM
Acetone	0.0242	0.00878		mg/Kg	1	10/18/2012 7:28:54 PM
Bromobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Bromodichloromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Bromoform	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Bromomethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
2-Butanone	ND	0.00878		mg/Kg	1	10/18/2012 7:28:54 PM
Carbon tetrachloride	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Chlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Chloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:45:00 AM
Lab ID: 1210858-007
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Chloromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
2-Chlorotoluene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Carbon disulfide	ND	0.00878		mg/Kg	1	10/18/2012 7:28:54 PM
4-Chlorotoluene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
cis-1,2-DCE	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
cis-1,3-Dichloropropene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dibromo-3-chloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Dibromochloromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Dibromomethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,3-Dichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,4-Dichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Dichlorodifluoromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1-Dichloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1-Dichloroethene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dichloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,3-Dichloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
2,2-Dichloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1-Dichloropropene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Hexachlorobutadiene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Isopropylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
4-Isopropyltoluene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Methylene chloride	ND	0.00264		mg/Kg	1	10/18/2012 7:28:54 PM
n-Butylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
2-Hexanone	ND	0.00878		mg/Kg	1	10/18/2012 7:28:54 PM
n-Propylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
sec-Butylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Styrene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
4-Methyl-2-pentanone	ND	0.00878		mg/Kg	1	10/18/2012 7:28:54 PM
tert-Butylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1,1,2-Tetrachloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1,2,2-Tetrachloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Tetrachloroethene (PCE)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
trans-1,2-DCE	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
trans-1,3-Dichloropropene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2,3-Trichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2,4-Trichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1,1-Trichloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1,2-Trichloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Trichloroethene (TCE)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Trichlorofluoromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-22 (1.5-2')
Project: SWMU NO.1
Collection Date: 10/16/2012 11:45:00 AM
Lab ID: 1210858-007
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Vinyl chloride	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	1	10/18/2012 7:28:54 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	1	10/18/2012 7:28:54 PM
Surr: Dibromofluoromethane	94.2	70-130		%REC	1	10/18/2012 7:28:54 PM
Surr: Toluene-d8	92.7	70-130		%REC	1	10/18/2012 7:28:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank
Project: SWMU NO.1
Collection Date:
Lab ID: 1210858-008
Matrix: MEOH (SOIL)
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 2:33:06 AM
Surr: BFB	98.8	84-116		%REC	1	10/26/2012 2:33:06 AM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Toluene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Naphthalene	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 7:30:31 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 7:30:31 PM
Acetone	ND	0.75		mg/Kg	1	10/24/2012 7:30:31 PM
Bromobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Bromoform	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Bromomethane	ND	0.15		mg/Kg	1	10/24/2012 7:30:31 PM
2-Butanone	ND	0.50		mg/Kg	1	10/24/2012 7:30:31 PM
Carbon disulfide	ND	0.50		mg/Kg	1	10/24/2012 7:30:31 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Chlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Chloroethane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Chloroform	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Chloromethane	ND	0.15		mg/Kg	1	10/24/2012 7:30:31 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Dibromomethane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup **Client Sample ID:** MeOH Blank
Project: SWMU NO.1 **Collection Date:**
Lab ID: 1210858-008 **Matrix:** MEOH (SOIL) **Received Date:** 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
2-Hexanone	ND	0.50		mg/Kg	1	10/24/2012 7:30:31 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/24/2012 7:30:31 PM
Methylene chloride	ND	0.15		mg/Kg	1	10/24/2012 7:30:31 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/24/2012 7:30:31 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Styrene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Vinyl chloride	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	10/24/2012 7:30:31 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	1	10/24/2012 7:30:31 PM
Surr: Dibromofluoromethane	91.8	70-130		%REC	1	10/24/2012 7:30:31 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	10/24/2012 7:30:31 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019047
Project Name: 1210858

Analytical Results Report

Sample Number 121019047-001
Client Sample ID 1210858-001D / SWMU 1-18 (0-0.5)
Sampling Date 10/16/2012
Sampling Time 10:00 AM
Date/Time Received 10/19/2012 1:14 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.261	10/30/2012	CRW	EPA 335.4	
%moisture	4.7	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019047-002
Client Sample ID 1210858-002D / SWMU 1-18 (1.5-2)
Sampling Date 10/16/2012
Sampling Time 10:10 AM
Date/Time Received 10/19/2012 1:14 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.282	10/30/2012	CRW	EPA 335.4	
%moisture	11.7	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019047-003
Client Sample ID 1210858-003D / SWMU 1-19 (0-0.5)
Sampling Date 10/16/2012
Sampling Time 10:35 AM
Date/Time Received 10/19/2012 1:14 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.26	10/30/2012	CRW	EPA 335.4	
%moisture	4.2	Percent		10/30/2012	TGT	%moisture	

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019047
Project Name: 1210858

Analytical Results Report

Sample Number 121019047-004
Client Sample ID 1210858-004D / SWMU 1-21 (0-0.5)
Sampling Date 10/16/2012
Sampling Time 11:05 AM
Date/Time Received 10/19/2012 1:14 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.274	10/30/2012	CRW	EPA 335.4	
%moisture	8.7	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019047-005
Client Sample ID 1210858-005D / SWMU 1-21 (0-0.5) DUP
Sampling Date 10/16/2012
Sampling Time 11:05 AM
Date/Time Received 10/19/2012 1:14 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.266	10/30/2012	CRW	EPA 335.4	
%moisture	6.4	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019047-006
Client Sample ID 1210858-006D / SWMU 1-22 (0-0.5)
Sampling Date 10/16/2012
Sampling Time 11:35 AM
Date/Time Received 10/19/2012 1:14 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.262	10/30/2012	CRW	EPA 335.4	
%moisture	4.9	Percent		10/30/2012	TGT	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019047
Project Name: 1210858

Analytical Results Report

Sample Number	121019047-007				
Client Sample ID	1210858-007D / SWMU 1-22 (1.5-2)	**Sampling Date**	10/16/2012	**Date/Time Received**	10/19/2012 1:14 PM
		Sampling Time	11:45 AM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.273	10/30/2012	CRW	EPA 335.4	
%moisture	10	Percent		10/30/2012	TGT	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4397** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4397** RunNo: **6325**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182283** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID **LCS-4397** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4397** RunNo: **6325**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182284** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	111	52.6	130			
Surr: DNOP	4.3		5.000		86.9	77.6	140			

Sample ID **MB-4404** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182984** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.6	77.6	140			

Sample ID **LCS-4404** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182985** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Sample ID **1210819-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183001** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID **1210819-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183002** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		91.7	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.5	74	117			
Surr: BFB	930		1000		93.1	84	116			

Sample ID **1210811-011BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6457** RunNo: **6457**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **186249** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	5.0	15.90	0	110	70	130	12.7	22.1	
Surr: BFB	590		636.0		93.2	84	116	0	0	

Sample ID **MB-4474** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4474** RunNo: **6487**
Prep Date: **10/23/2012** Analysis Date: **10/25/2012** SeqNo: **187625** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		95.0	84	116			

Sample ID **LCS-4474** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4474** RunNo: **6487**
Prep Date: **10/23/2012** Analysis Date: **10/25/2012** SeqNo: **187626** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	74	117			
Surr: BFB	1000		1000		100	84	116			

Sample ID **1210A08-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4474** RunNo: **6487**
Prep Date: **10/23/2012** Analysis Date: **10/25/2012** SeqNo: **187638** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.34	11.22	90.8	70	130			
Surr: BFB	1100		973.7		117	84	116			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210A08-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4474** RunNo: **6487**
Prep Date: **10/23/2012** Analysis Date: **10/25/2012** SeqNo: **187639** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.39	11.22	89.9	70	130	0.479	22.1	
Surr: BFB	1100		975.6		115	84	116	0	0	

Sample ID **1210811-011BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6457** RunNo: **6487**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187647** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.91	0	96.6	70	130			
Surr: BFB	650		636.4		102	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4362** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186696** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.1	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.5	70	130			
Surr: Toluene-d8	0.49		0.5000		98.5	70	130			

Sample ID **lcs-4362** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186792** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.7	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.1	70	130			
Surr: Toluene-d8	0.47		0.5000		94.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4393**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4393**	RunNo: **6360**			
Prep Date: **10/18/2012**	Analysis Date: **10/18/2012**	SeqNo: **182928**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4393** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4393** RunNo: **6360**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182928** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	46.1		50.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	44.8		50.00		89.6	70	130			
Surr: Dibromofluoromethane	53.0		50.00		106	70	130			
Surr: Toluene-d8	42.4		50.00		84.8	70	130			

Sample ID **lcs-4393** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4393** RunNo: **6360**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.87	1.00	10.00	0	88.7	60	140			
Toluene	8.50	1.00	10.00	0	85.0	60	140			
Chlorobenzene	9.38	1.00	10.00	0	93.8	60	140			
1,1-Dichloroethene	11.0	1.00	10.00	0	110	60	140			
Trichloroethene (TCE)	7.70	1.00	10.00	0	77.0	60	140			
Surr: 1,2-Dichloroethane-d4	44.9		50.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	40.9		50.00		81.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4393**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4393**	RunNo:	**6360**
Prep Date:	**10/18/2012**	Analysis Date:	**10/18/2012**	SeqNo:	**182930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	50.4		50.00		101	70	130			
Surr: Toluene-d8	41.1		50.00		82.2	70	130			

Sample ID	**mb-4419**	SampType:	**MBLK**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**PBS**	Batch ID:	**4419**	RunNo:	**6365**
Prep Date:	**10/19/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183060** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4419**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4419**	RunNo: **6365**			
Prep Date: **10/19/2012**	Analysis Date: **10/19/2012**	SeqNo: **183060**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	0.00320	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.7		50.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	43.0		50.00		85.9	70	130			
Surr: Dibromofluoromethane	50.0		50.00		100	70	130			
Surr: Toluene-d8	51.0		50.00		102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4419**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4419**	RunNo:	**6365**
Prep Date:	**10/19/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.7	1.00	12.50	0	93.9	60	140			
Toluene	10.2	1.00	12.50	0	82.0	60	140			
Chlorobenzene	11.9	1.00	12.50	0	94.9	60	140			
1,1-Dichloroethene	14.5	1.00	12.50	0	116	60	140			
Trichloroethene (TCE)	9.39	1.00	12.50	0	75.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.4		50.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	41.6		50.00		83.2	70	130			
Surr: Dibromofluoromethane	46.8		50.00		93.6	70	130			
Surr: Toluene-d8	46.1		50.00		92.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4422** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185414** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	74.7	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	76.9	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	75.3	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.0	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	79.3	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.1	39.1	86.9			
4-Nitrophenol	2.4	0.25	3.330	0	73.5	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	61.6	36.2	80			
Phenol	2.4	0.20	3.330	0	72.5	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.5	0.20	1.670	0	91.6	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		103	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		95.5	20	131			
Surr: 2-Fluorophenol	2.8		3.330		83.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.6	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.9	25.6	137			
Surr: Phenol-d5	3.0		3.330		89.0	20.3	132			

Sample ID **mb-4422** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4422**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4422**	RunNo: **6445**			
Prep Date: **10/19/2012**	Analysis Date: **10/23/2012**	SeqNo: **185416**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4422** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.9		3.330		117	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		98.4	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.6	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		109	25.6	137			
Surr: Phenol-d5	3.2		3.330		96.3	20.3	132			

Sample ID **1210858-004Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-21 (0-0.5')** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.659	0	69.3	25.6	142			
4-Chloro-3-methylphenol	2.2	0.50	3.309	0	67.6	63.7	100			
2-Chlorophenol	2.0	0.20	3.309	0	61.7	22.2	126			
1,4-Dichlorobenzene	1.1	0.20	1.659	0	63.6	12.4	115			
2,4-Dinitrotoluene	1.2	0.50	1.659	0	74.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	0.20	1.659	0	65.9	13.9	136			
4-Nitrophenol	2.2	0.25	3.309	0.09121	63.6	36.7	130			
Pentachlorophenol	1.9	0.40	3.309	0	56.5	15.8	113			
Phenol	2.1	0.20	3.309	0	63.9	25.1	124			
Pyrene	1.1	0.20	1.659	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.3	0.20	1.659	0	78.0	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.309		90.3	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.659		90.0	20	131			
Surr: 2-Fluorophenol	2.5		3.309		74.2	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		80.0	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.659		101	25.6	137			
Surr: Phenol-d5	2.8		3.309		84.0	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210858-004Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 1-21 (0-0.5')** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185434** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.681	0	71.3	25.6	142	4.05	22	
4-Chloro-3-methylphenol	2.3	0.50	3.351	0	69.5	63.7	100	4.10	27.3	
2-Chlorophenol	2.3	0.20	3.351	0	68.2	22.2	126	11.4	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.681	0	63.4	12.4	115	1.02	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.681	0	77.0	14.9	142	4.43	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.681	0	75.9	13.9	136	15.3	22.6	
4-Nitrophenol	2.3	0.25	3.351	0.09121	64.9	36.7	130	3.21	20	
Pentachlorophenol	2.0	0.40	3.351	0	59.9	15.8	113	7.18	27.1	
Phenol	2.2	0.20	3.351	0	66.5	25.1	124	5.18	32.2	
Pyrene	1.2	0.20	1.681	0	70.8	35.8	124	4.36	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.681	0	80.5	30	113	4.34	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.351		93.6	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.681		91.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.351		75.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.681		81.4	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.681		96.9	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.351		85.9	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4426** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185363** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4426** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185364** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID **1210859-002CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185391** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1654	0.01134	102	75	125			

Sample ID **1210859-002CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185392** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1685	0.01134	99.0	75	125	1.06	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4441** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186822** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4441** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186823** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	23	2.5	25.00	0	92.2	80	120			
Arsenic	23	2.5	25.00	0	93.7	80	120			
Barium	23	0.10	25.00	0	92.2	80	120			
Beryllium	24	0.15	25.00	0	95.1	80	120			
Cadmium	23	0.10	25.00	0	92.8	80	120			
Chromium	23	0.30	25.00	0	91.8	80	120			
Cobalt	22	0.30	25.00	0	88.9	80	120			
Iron	23	1.0	25.00	0	93.7	80	120			
Lead	23	0.25	25.00	0	91.3	80	120			
Manganese	23	0.10	25.00	0.04450	90.3	80	120			
Nickel	22	0.50	25.00	0	87.6	80	120			
Selenium	22	2.5	25.00	0	87.2	80	120			
Vanadium	24	2.5	25.00	0	95.4	80	120			
Zinc	23	2.5	25.00	0	90.7	80	120			

Sample ID **1210656-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.2	5.0	24.67	0	20.9	75	125			S
Arsenic	23	5.0	24.67	2.167	85.1	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210656-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	21	0.30	24.67	0.6108	83.1	75	125			
Cadmium	19	0.20	24.67	0	78.2	75	125			
Chromium	31	0.60	24.67	9.563	87.0	75	125			
Cobalt	21	0.60	24.67	3.401	71.6	75	125			S
Lead	22	0.50	24.67	4.192	72.5	75	125			S
Nickel	24	1.0	24.67	5.943	73.5	75	125			S
Selenium	11	5.0	24.67	0	43.9	75	125			S
Vanadium	41	5.0	24.67	17.94	92.0	75	125			

Sample ID **1210656-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	24.23	0	20.3	75	125	200	20	S
Arsenic	23	5.0	24.23	2.167	87.5	75	125	0.929	20	
Beryllium	21	0.30	24.23	0.6108	85.4	75	125	0.909	20	
Cadmium	20	0.20	24.23	0	82.3	75	125	3.30	20	
Chromium	30	0.60	24.23	9.563	83.1	75	125	4.37	20	
Cobalt	21	0.60	24.23	3.401	72.9	75	125	0.0820	20	S
Lead	21	0.50	24.23	4.192	70.5	75	125	3.76	20	S
Nickel	24	1.0	24.23	5.943	75.3	75	125	0.450	20	
Selenium	13	5.0	24.23	0	54.1	75	125	19.1	20	S
Vanadium	39	5.0	24.23	17.94	88.1	75	125	3.41	20	

Sample ID **MB-4441** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4441** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188994** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID **LCS-4441** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4441** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188995** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.3	0.25	5.000	0	106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210858**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210656-001CMS**	SampType:	**MS**	TestCode:	**EPA Method 6010B: Soil Metals**					
Client ID:	**BatchQC**	Batch ID:	**4441**	RunNo:	**6598**					
Prep Date:	**10/22/2012**	Analysis Date:	**10/31/2012**	SeqNo:	**190745**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.935	0	86.1	75	125			

Sample ID	**1210656-001CMSD**	SampType:	**MSD**	TestCode:	**EPA Method 6010B: Soil Metals**					
Client ID:	**BatchQC**	Batch ID:	**4441**	RunNo:	**6598**					
Prep Date:	**10/22/2012**	Analysis Date:	**10/31/2012**	SeqNo:	**190746**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.847	0	87.1	75	125	0.553	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210858

Received by/date: LM 10/18/12

Logged By: **Michelle Garcia** 10/18/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/18/2012 8:56:17 AM Michelle Garcia

Reviewed By: 10/18/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210858	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/16/12	1000	SOIL	SWMU 1-18 (0-0.5')	2 VIALS	SOBI	-001										X						
	↓		↓	2 VIALS	MEOH											X						
	↓		↓	3 JARS	—											X	X	X	X			
	1010		SWMU 1-18 (1-1.5')	2 VIALS	SOBI	-002										X						
	↓		↓	2 VIALS	MEOH											X						
	↓		↓	3 JARS	—											X	X	X	X			
	1035		SWMU 1-19 (0-0.5')	2 VIALS	SOBI	-003										X						
	↓		↓	2 VIALS	MEOH											X						
	↓		↓	3 JARS	—											X	X	X	X			
	1105		SWMU 1-21 (0-0.5')	2 VIALS	SOBI	-004										X						
	↓		↓	2 VIALS	MEOH											X						
↓	↓	↓	↓	3 JARS	—											X	X	X	X			

Date	Time	Relinquished by:	Received by:	Date	Time
10/17/12	0700	[signature]	[signature]	10/18/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

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Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210858	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/16/12	1105	SOIL	SWMU 1-21(0-0.5')	2 VIALS	5OB1	-005										X						
			DUP	2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1135		SWMU 1-22(0-0.5')	2 VIALS	5OB1	-006										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1145		SWMU 1-22(1.5-2)	2 VIALS	5OB1	-007										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	—	MEOH	MEOH BLANK	2 VIALS	MEOH	-008										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/17/12	0700	[signature]	[signature]	10/18/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 13, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.1 OrderNo.: 1210859

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-23 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:10:00 PM
Lab ID: 1210859-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 6:39:57 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/21/2012 6:39:57 AM
Surr: DNOP	105	77.6-140		%REC	1	10/21/2012 6:39:57 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:01:49 AM
Surr: BFB	98.9	84-116		%REC	1	10/26/2012 3:01:49 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.11	0.033		mg/kg	1	10/23/2012 6:59:12 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
Barium	670	2.0		mg/Kg	20	10/25/2012 6:52:13 PM
Beryllium	0.69	0.30		mg/Kg	2	10/25/2012 6:49:19 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 6:49:19 PM
Chromium	16	0.60		mg/Kg	2	10/25/2012 6:49:19 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 6:49:19 PM
Iron	14000	500		mg/Kg	500	10/31/2012 2:08:56 PM
Lead	3.0	0.50		mg/Kg	2	10/25/2012 6:49:19 PM
Manganese	980	2.0		mg/Kg	20	10/25/2012 6:52:13 PM
Nickel	7.9	1.0		mg/Kg	2	10/25/2012 6:49:19 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:06:02 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
Zinc	21	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Aniline	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Anthracene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Azobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-23 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:10:00 PM
Lab ID: 1210859-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Carbazole	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/24/2012 6:26:18 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Chrysene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/24/2012 6:26:18 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/24/2012 6:26:18 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Fluorene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Isophorone	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Naphthalene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-23 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:10:00 PM
Lab ID: 1210859-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/24/2012 6:26:18 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Phenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Pyrene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Pyridine	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Surr: 2,4,6-Tribromophenol	95.8	21.3-145		%REC	1	10/24/2012 6:26:18 PM
Surr: 2-Fluorobiphenyl	96.3	20-131		%REC	1	10/24/2012 6:26:18 PM
Surr: 2-Fluorophenol	91.1	11.9-130		%REC	1	10/24/2012 6:26:18 PM
Surr: 4-Terphenyl-d14	92.6	25.1-149		%REC	1	10/24/2012 6:26:18 PM
Surr: Nitrobenzene-d5	105	25.6-137		%REC	1	10/24/2012 6:26:18 PM
Surr: Phenol-d5	85.5	20.3-132		%REC	1	10/24/2012 6:26:18 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00193	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Toluene	0.00211	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Ethylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Xylenes, Total	0.00180	0.00171		mg/Kg	1	10/18/2012 7:59:44 PM
Methyl tert-butyl ether (MTBE)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2,4-Trimethylbenzene	0.00102	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,3,5-Trimethylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dichloroethane (EDC)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dibromoethane (EDB)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Naphthalene	ND	0.00171		mg/Kg	1	10/18/2012 7:59:44 PM
1-Methylnaphthalene	ND	0.00342		mg/Kg	1	10/18/2012 7:59:44 PM
2-Methylnaphthalene	ND	0.00342		mg/Kg	1	10/18/2012 7:59:44 PM
Acetone	0.0502	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
Bromobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Bromodichloromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Bromoform	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Bromomethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
2-Butanone	0.00903	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
Carbon tetrachloride	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Chlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Chloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-23 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:10:00 PM
Lab ID: 1210859-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Chloromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
2-Chlorotoluene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Carbon disulfide	0.0156	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
4-Chlorotoluene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
cis-1,2-DCE	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
cis-1,3-Dichloropropene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dibromo-3-chloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Dibromochloromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Dibromomethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,3-Dichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,4-Dichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Dichlorodifluoromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1-Dichloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1-Dichloroethene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dichloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,3-Dichloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
2,2-Dichloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1-Dichloropropene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Hexachlorobutadiene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Isopropylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
4-Isopropyltoluene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Methylene chloride	ND	0.00257		mg/Kg	1	10/18/2012 7:59:44 PM
n-Butylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
2-Hexanone	ND	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
n-Propylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
sec-Butylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Styrene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
4-Methyl-2-pentanone	ND	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
tert-Butylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1,1,2-Tetrachloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1,2,2-Tetrachloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Tetrachloroethene (PCE)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
trans-1,2-DCE	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
trans-1,3-Dichloropropene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2,3-Trichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2,4-Trichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1,1-Trichloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1,2-Trichloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Trichloroethene (TCE)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Trichlorofluoromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-23 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:10:00 PM
Lab ID: 1210859-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Vinyl chloride	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%REC	1	10/18/2012 7:59:44 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/18/2012 7:59:44 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/18/2012 7:59:44 PM
Surr: Toluene-d8	84.7	70-130		%REC	1	10/18/2012 7:59:44 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-39 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:35:00 PM
Lab ID: 1210859-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 12:20:15 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/19/2012 12:20:15 PM
Surr: DNOP	99.5	77.6-140		%REC	1	10/19/2012 12:20:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:30:32 AM
Surr: BFB	99.7	84-116		%REC	1	10/26/2012 3:30:32 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/23/2012 7:00:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
Barium	450	2.0		mg/Kg	20	10/25/2012 7:03:53 PM
Beryllium	0.71	0.30		mg/Kg	2	10/25/2012 7:00:48 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 7:00:48 PM
Chromium	10	0.60		mg/Kg	2	10/25/2012 7:00:48 PM
Cobalt	3.9	0.60		mg/Kg	2	10/25/2012 7:00:48 PM
Iron	18000	500		mg/Kg	500	10/31/2012 2:26:50 PM
Lead	4.6	0.50		mg/Kg	2	10/25/2012 7:00:48 PM
Manganese	580	2.0		mg/Kg	20	10/25/2012 7:03:53 PM
Nickel	6.2	1.0		mg/Kg	2	10/25/2012 7:00:48 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:11:46 PM
Vanadium	25	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
Zinc	16	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Aniline	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Anthracene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Azobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-39 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:35:00 PM
Lab ID: 1210859-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Carbazole	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/24/2012 6:56:31 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Chrysene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/24/2012 6:56:31 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/24/2012 6:56:31 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Fluorene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Isophorone	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Naphthalene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-39 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:35:00 PM
Lab ID: 1210859-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/24/2012 6:56:31 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Phenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Pyrene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Pyridine	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Surr: 2,4,6-Tribromophenol	84.6	21.3-145		%REC	1	10/24/2012 6:56:31 PM
Surr: 2-Fluorobiphenyl	83.8	20-131		%REC	1	10/24/2012 6:56:31 PM
Surr: 2-Fluorophenol	72.6	11.9-130		%REC	1	10/24/2012 6:56:31 PM
Surr: 4-Terphenyl-d14	79.1	25.1-149		%REC	1	10/24/2012 6:56:31 PM
Surr: Nitrobenzene-d5	91.4	25.6-137		%REC	1	10/24/2012 6:56:31 PM
Surr: Phenol-d5	75.8	20.3-132		%REC	1	10/24/2012 6:56:31 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00189	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Toluene	0.00109	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Ethylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Xylenes, Total	ND	0.00154		mg/Kg	1	10/18/2012 8:30:32 PM
Methyl tert-butyl ether (MTBE)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2,4-Trimethylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,3,5-Trimethylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dichloroethane (EDC)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dibromoethane (EDB)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Naphthalene	ND	0.00154		mg/Kg	1	10/18/2012 8:30:32 PM
1-Methylnaphthalene	ND	0.00308		mg/Kg	1	10/18/2012 8:30:32 PM
2-Methylnaphthalene	ND	0.00308		mg/Kg	1	10/18/2012 8:30:32 PM
Acetone	0.0521	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
Bromobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Bromodichloromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Bromoform	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Bromomethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
2-Butanone	ND	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
Carbon tetrachloride	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Chlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Chloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-39 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:35:00 PM
Lab ID: 1210859-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Chloromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
2-Chlorotoluene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Carbon disulfide	ND	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
4-Chlorotoluene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
cis-1,2-DCE	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
cis-1,3-Dichloropropene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dibromo-3-chloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Dibromochloromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Dibromomethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,3-Dichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,4-Dichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Dichlorodifluoromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1-Dichloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1-Dichloroethene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dichloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,3-Dichloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
2,2-Dichloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1-Dichloropropene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Hexachlorobutadiene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Isopropylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
4-Isopropyltoluene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Methylene chloride	ND	0.00231		mg/Kg	1	10/18/2012 8:30:32 PM
n-Butylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
2-Hexanone	ND	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
n-Propylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
sec-Butylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Styrene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
4-Methyl-2-pentanone	ND	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
tert-Butylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1,1,2-Tetrachloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1,2,2-Tetrachloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Tetrachloroethene (PCE)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
trans-1,2-DCE	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
trans-1,3-Dichloropropene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2,3-Trichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2,4-Trichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1,1-Trichloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1,2-Trichloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Trichloroethene (TCE)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Trichlorofluoromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-39 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 12:35:00 PM
Lab ID: 1210859-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Vinyl chloride	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	1	10/18/2012 8:30:32 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/18/2012 8:30:32 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/18/2012 8:30:32 PM
Surr: Toluene-d8	84.9	70-130		%REC	1	10/18/2012 8:30:32 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:00:00 PM
Lab ID: 1210859-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 4:42:29 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/21/2012 4:42:29 PM
Surr: DNOP	104	77.6-140		%REC	1	10/21/2012 4:42:29 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:59:12 AM
Surr: BFB	98.9	84-116		%REC	1	10/26/2012 3:59:12 AM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	11/1/2012 3:57:37 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
Barium	370	2.0		mg/Kg	20	10/25/2012 7:27:51 PM
Beryllium	0.53	0.30		mg/Kg	2	10/25/2012 7:24:44 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 7:24:44 PM
Chromium	14	0.60		mg/Kg	2	10/25/2012 7:24:44 PM
Cobalt	3.2	0.60		mg/Kg	2	10/25/2012 7:24:44 PM
Iron	11000	500		mg/Kg	500	10/25/2012 7:30:37 PM
Lead	5.6	0.50		mg/Kg	2	10/25/2012 7:24:44 PM
Manganese	310	2.0		mg/Kg	20	10/25/2012 7:27:51 PM
Nickel	8.6	1.0		mg/Kg	2	10/25/2012 7:24:44 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
Silver	ND	0.25		mg/Kg	1	10/31/2012 2:29:39 PM
Vanadium	21	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
Zinc	27	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Aniline	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Anthracene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Azobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:00:00 PM
Lab ID: 1210859-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Carbazole	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/24/2012 7:26:43 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Chrysene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/24/2012 7:26:43 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/24/2012 7:26:43 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Fluorene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Isophorone	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Naphthalene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:00:00 PM
Lab ID: 1210859-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/24/2012 7:26:43 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Phenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Pyrene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Pyridine	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Surr: 2,4,6-Tribromophenol	79.2	21.3-145		%REC	1	10/24/2012 7:26:43 PM
Surr: 2-Fluorobiphenyl	91.4	20-131		%REC	1	10/24/2012 7:26:43 PM
Surr: 2-Fluorophenol	93.5	11.9-130		%REC	1	10/24/2012 7:26:43 PM
Surr: 4-Terphenyl-d14	103	25.1-149		%REC	1	10/24/2012 7:26:43 PM
Surr: Nitrobenzene-d5	98.3	25.6-137		%REC	1	10/24/2012 7:26:43 PM
Surr: Phenol-d5	87.3	20.3-132		%REC	1	10/24/2012 7:26:43 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Toluene	0.00202	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Ethylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Xylenes, Total	0.00162	0.00159		mg/Kg	1	10/18/2012 9:01:18 PM
Methyl tert-butyl ether (MTBE)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2,4-Trimethylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,3,5-Trimethylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dichloroethane (EDC)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dibromoethane (EDB)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Naphthalene	ND	0.00159		mg/Kg	1	10/18/2012 9:01:18 PM
1-Methylnaphthalene	ND	0.00318		mg/Kg	1	10/18/2012 9:01:18 PM
2-Methylnaphthalene	ND	0.00318		mg/Kg	1	10/18/2012 9:01:18 PM
Acetone	0.0398	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
Bromobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Bromodichloromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Bromoform	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Bromomethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
2-Butanone	ND	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
Carbon tetrachloride	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Chlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Chloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:00:00 PM
Lab ID: 1210859-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Chloromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
2-Chlorotoluene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Carbon disulfide	ND	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
4-Chlorotoluene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
cis-1,2-DCE	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
cis-1,3-Dichloropropene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dibromo-3-chloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Dibromochloromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Dibromomethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,3-Dichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,4-Dichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Dichlorodifluoromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1-Dichloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1-Dichloroethene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dichloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,3-Dichloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
2,2-Dichloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1-Dichloropropene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Hexachlorobutadiene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Isopropylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
4-Isopropyltoluene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Methylene chloride	ND	0.00238		mg/Kg	1	10/18/2012 9:01:18 PM
n-Butylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
2-Hexanone	ND	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
n-Propylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
sec-Butylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Styrene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
4-Methyl-2-pentanone	ND	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
tert-Butylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1,1,2-Tetrachloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1,2,2-Tetrachloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Tetrachloroethene (PCE)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
trans-1,2-DCE	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
trans-1,3-Dichloropropene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2,3-Trichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2,4-Trichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1,1-Trichloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1,2-Trichloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Trichloroethene (TCE)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Trichlorofluoromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:00:00 PM
Lab ID: 1210859-003
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Vinyl chloride	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%REC	1	10/18/2012 9:01:18 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	1	10/18/2012 9:01:18 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/18/2012 9:01:18 PM
Surr: Toluene-d8	83.5	70-130		%REC	1	10/18/2012 9:01:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:15:00 PM
Lab ID: 1210859-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 5:07:51 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/21/2012 5:07:51 PM
Surr: DNOP	106	77.6-140		%REC	1	10/21/2012 5:07:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 4:27:52 AM
Surr: BFB	96.4	84-116		%REC	1	10/26/2012 4:27:52 AM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	0.034	0.033		mg/Kg	1	11/1/2012 4:04:25 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
Barium	360	2.0		mg/Kg	20	10/25/2012 7:39:34 PM
Beryllium	0.45	0.30		mg/Kg	2	10/25/2012 7:36:32 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 7:36:32 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 7:36:32 PM
Cobalt	4.3	0.60		mg/Kg	2	10/25/2012 7:36:32 PM
Iron	10000	500		mg/Kg	500	10/25/2012 7:42:20 PM
Lead	4.1	0.50		mg/Kg	2	10/25/2012 7:36:32 PM
Manganese	270	2.0		mg/Kg	20	10/25/2012 7:39:34 PM
Nickel	9.8	1.0		mg/Kg	2	10/25/2012 7:36:32 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:32:45 PM
Vanadium	20	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
Zinc	28	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Acenaphthylene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Aniline	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Anthracene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Azobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:15:00 PM
Lab ID: 1210859-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Carbazole	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/24/2012 7:56:49 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Chrysene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Dibenzofuran	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/24/2012 7:56:49 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/24/2012 7:56:49 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
Fluoranthene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Fluorene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Hexachloroethane	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Isophorone	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Naphthalene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:15:00 PM
Lab ID: 1210859-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
2-Nitrophenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/24/2012 7:56:49 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
Phenanthrene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Phenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Pyrene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Pyridine	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Surr: 2,4,6-Tribromophenol	64.9	21.3-145		%REC	1	10/24/2012 7:56:49 PM
Surr: 2-Fluorobiphenyl	87.6	20-131		%REC	1	10/24/2012 7:56:49 PM
Surr: 2-Fluorophenol	87.3	11.9-130		%REC	1	10/24/2012 7:56:49 PM
Surr: 4-Terphenyl-d14	111	25.1-149		%REC	1	10/24/2012 7:56:49 PM
Surr: Nitrobenzene-d5	95.7	25.6-137		%REC	1	10/24/2012 7:56:49 PM
Surr: Phenol-d5	82.8	20.3-132		%REC	1	10/24/2012 7:56:49 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00130	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Toluene	0.00428	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Ethylbenzene	0.00115	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Xylenes, Total	0.00404	0.00212		mg/Kg	1	10/18/2012 9:32:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2,4-Trimethylbenzene	0.00110	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,3,5-Trimethylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dichloroethane (EDC)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dibromoethane (EDB)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Naphthalene	ND	0.00212		mg/Kg	1	10/18/2012 9:32:07 PM
1-Methylnaphthalene	ND	0.00425		mg/Kg	1	10/18/2012 9:32:07 PM
2-Methylnaphthalene	ND	0.00425		mg/Kg	1	10/18/2012 9:32:07 PM
Acetone	0.0739	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
Bromobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Bromodichloromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Bromoform	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Bromomethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
2-Butanone	ND	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
Carbon tetrachloride	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Chlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Chloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:15:00 PM
Lab ID: 1210859-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Chloromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
2-Chlorotoluene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Carbon disulfide	ND	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
4-Chlorotoluene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
cis-1,2-DCE	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
cis-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dibromo-3-chloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Dibromochloromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Dibromomethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,3-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,4-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Dichlorodifluoromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1-Dichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1-Dichloroethene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,3-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
2,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Hexachlorobutadiene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Isopropylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
4-Isopropyltoluene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Methylene chloride	ND	0.00319		mg/Kg	1	10/18/2012 9:32:07 PM
n-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
2-Hexanone	ND	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
n-Propylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
sec-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Styrene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
4-Methyl-2-pentanone	ND	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
tert-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1,1,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1,2,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Tetrachloroethene (PCE)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
trans-1,2-DCE	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
trans-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2,3-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2,4-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1,1-Trichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1,2-Trichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Trichloroethene (TCE)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Trichlorofluoromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-25 (0.5-1')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:15:00 PM
Lab ID: 1210859-004
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Vinyl chloride	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	1	10/18/2012 9:32:07 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	1	10/18/2012 9:32:07 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/18/2012 9:32:07 PM
Surr: Toluene-d8	89.6	70-130		%REC	1	10/18/2012 9:32:07 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-26 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:35:00 PM
Lab ID: 1210859-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/21/2012 8:20:05 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/21/2012 8:20:05 AM
Surr: DNOP	104	77.6-140		%REC	1	10/21/2012 8:20:05 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:05:35 PM
Surr: BFB	98.1	84-116		%REC	1	10/26/2012 3:05:35 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	0.051	0.033		mg/Kg	1	11/1/2012 4:06:12 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
Barium	390	2.0		mg/Kg	20	10/25/2012 7:50:55 PM
Beryllium	0.62	0.30		mg/Kg	2	10/25/2012 7:48:02 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 7:48:02 PM
Chromium	7.9	0.60		mg/Kg	2	10/25/2012 7:48:02 PM
Cobalt	3.7	0.60		mg/Kg	2	10/25/2012 7:48:02 PM
Iron	11000	500		mg/Kg	500	10/25/2012 8:05:04 PM
Lead	2.7	0.50		mg/Kg	2	10/25/2012 7:48:02 PM
Manganese	670	2.0		mg/Kg	20	10/25/2012 7:50:55 PM
Nickel	6.1	1.0		mg/Kg	2	10/25/2012 7:48:02 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:35:55 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
Zinc	16	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Aniline	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Anthracene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Azobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzoic acid	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-26 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:35:00 PM
Lab ID: 1210859-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Carbazole	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/24/2012 8:26:49 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Chrysene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
Di-n-octyl phthalate	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/24/2012 8:26:49 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/24/2012 8:26:49 PM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Fluorene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Isophorone	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2-Methylphenol	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Naphthalene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-26 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:35:00 PM
Lab ID: 1210859-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
Nitrobenzene	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/24/2012 8:26:49 PM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Phenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Pyrene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Pyridine	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Surr: 2,4,6-Tribromophenol	84.7	21.3-145		%REC	1	10/24/2012 8:26:49 PM
Surr: 2-Fluorobiphenyl	79.8	20-131		%REC	1	10/24/2012 8:26:49 PM
Surr: 2-Fluorophenol	85.5	11.9-130		%REC	1	10/24/2012 8:26:49 PM
Surr: 4-Terphenyl-d14	82.6	25.1-149		%REC	1	10/24/2012 8:26:49 PM
Surr: Nitrobenzene-d5	98.8	25.6-137		%REC	1	10/24/2012 8:26:49 PM
Surr: Phenol-d5	80.2	20.3-132		%REC	1	10/24/2012 8:26:49 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00185	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Toluene	0.00369	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Ethylbenzene	0.00121	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Xylenes, Total	0.00503	0.00147		mg/Kg	1	10/18/2012 10:02:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2,4-Trimethylbenzene	0.00207	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,3,5-Trimethylbenzene	0.000828	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dichloroethane (EDC)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dibromoethane (EDB)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Naphthalene	ND	0.00147		mg/Kg	1	10/18/2012 10:02:52 PM
1-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/18/2012 10:02:52 PM
2-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/18/2012 10:02:52 PM
Acetone	0.0644	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
Bromobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Bromodichloromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Bromoform	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Bromomethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
2-Butanone	ND	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
Carbon tetrachloride	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Chlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Chloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-26 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:35:00 PM
Lab ID: 1210859-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Chloromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
2-Chlorotoluene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Carbon disulfide	ND	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
4-Chlorotoluene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
cis-1,2-DCE	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
cis-1,3-Dichloropropene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dibromo-3-chloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Dibromochloromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Dibromomethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,3-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,4-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Dichlorodifluoromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1-Dichloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1-Dichloroethene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dichloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,3-Dichloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
2,2-Dichloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1-Dichloropropene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Hexachlorobutadiene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Isopropylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
4-Isopropyltoluene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Methylene chloride	ND	0.00220		mg/Kg	1	10/18/2012 10:02:52 PM
n-Butylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
2-Hexanone	ND	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
n-Propylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
sec-Butylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Styrene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
4-Methyl-2-pentanone	ND	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
tert-Butylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1,1,2-Tetrachloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1,2,2-Tetrachloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Tetrachloroethene (PCE)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
trans-1,2-DCE	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
trans-1,3-Dichloropropene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2,3-Trichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2,4-Trichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1,1-Trichloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1,2-Trichloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Trichloroethene (TCE)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Trichlorofluoromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-26 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 1:35:00 PM
Lab ID: 1210859-005
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Vinyl chloride	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%REC	1	10/18/2012 10:02:52 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/18/2012 10:02:52 PM
Surr: Dibromofluoromethane	98.1	70-130		%REC	1	10/18/2012 10:02:52 PM
Surr: Toluene-d8	95.4	70-130		%REC	1	10/18/2012 10:02:52 PM

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-29 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 2:40:00 PM
Lab ID: 1210859-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	76	9.6		mg/Kg	1	10/21/2012 9:10:18 AM
Motor Oil Range Organics (MRO)	110	48		mg/Kg	1	10/21/2012 9:10:18 AM
Surr: DNOP	112	77.6-140		%REC	1	10/21/2012 9:10:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:34:21 PM
Surr: BFB	97.4	84-116		%REC	1	10/26/2012 3:34:21 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	0.22	0.033		mg/Kg	1	11/1/2012 4:07:57 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
Barium	550	2.0		mg/Kg	20	10/25/2012 8:13:48 PM
Beryllium	0.69	0.30		mg/Kg	2	10/25/2012 8:10:53 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:10:53 PM
Chromium	17	0.60		mg/Kg	2	10/25/2012 8:10:53 PM
Cobalt	5.1	0.60		mg/Kg	2	10/25/2012 8:10:53 PM
Iron	15000	500		mg/Kg	500	10/25/2012 8:16:27 PM
Lead	7.0	0.50		mg/Kg	2	10/25/2012 8:10:53 PM
Manganese	620	2.0		mg/Kg	20	10/25/2012 8:13:48 PM
Nickel	9.3	1.0		mg/Kg	2	10/25/2012 8:10:53 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:38:49 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
Zinc	48	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Acenaphthylene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Aniline	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Anthracene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Azobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benz(a)anthracene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzo(a)pyrene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzo(b)fluoranthene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzo(g,h,i)perylene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzo(k)fluoranthene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzoic acid	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
Benzyl alcohol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Bis(2-chloroethoxy)methane	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Bis(2-chloroethyl)ether	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Bis(2-chloroisopropyl)ether	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-29 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 2:40:00 PM
Lab ID: 1210859-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
4-Bromophenyl phenyl ether	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Butyl benzyl phthalate	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Carbazole	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
4-Chloroaniline	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
2-Chloronaphthalene	ND	1.0		mg/Kg	1	10/24/2012 8:56:42 PM
2-Chlorophenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
4-Chlorophenyl phenyl ether	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Chrysene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Di-n-butyl phthalate	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
Di-n-octyl phthalate	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
Dibenz(a,h)anthracene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Dibenzofuran	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
1,2-Dichlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
1,3-Dichlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
1,4-Dichlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
3,3´-Dichlorobenzidine	ND	1.0		mg/Kg	1	10/24/2012 8:56:42 PM
Diethyl phthalate	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Dimethyl phthalate	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2,4-Dichlorophenol	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
2,4-Dimethylphenol	ND	1.2		mg/Kg	1	10/24/2012 8:56:42 PM
4,6-Dinitro-2-methylphenol	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
2,4-Dinitrophenol	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
2,4-Dinitrotoluene	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
2,6-Dinitrotoluene	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
Fluoranthene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Fluorene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Hexachlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Hexachlorobutadiene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Hexachlorocyclopentadiene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Hexachloroethane	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Indeno(1,2,3-cd)pyrene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Isophorone	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
1-Methylnaphthalene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2-Methylnaphthalene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2-Methylphenol	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
3+4-Methylphenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
N-Nitrosodi-n-propylamine	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
N-Nitrosodiphenylamine	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Naphthalene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2-Nitroaniline	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-29 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 2:40:00 PM
Lab ID: 1210859-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
4-Nitroaniline	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
Nitrobenzene	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
2-Nitrophenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
4-Nitrophenol	ND	1.0		mg/Kg	1	10/24/2012 8:56:42 PM
Pentachlorophenol	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
Phenanthrene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Phenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Pyrene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Pyridine	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
1,2,4-Trichlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2,4,5-Trichlorophenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2,4,6-Trichlorophenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Surr: 2,4,6-Tribromophenol	84.6	21.3-145		%REC	1	10/24/2012 8:56:42 PM
Surr: 2-Fluorobiphenyl	79.2	20-131		%REC	1	10/24/2012 8:56:42 PM
Surr: 2-Fluorophenol	82.8	11.9-130		%REC	1	10/24/2012 8:56:42 PM
Surr: 4-Terphenyl-d14	86.9	25.1-149		%REC	1	10/24/2012 8:56:42 PM
Surr: Nitrobenzene-d5	89.4	25.6-137		%REC	1	10/24/2012 8:56:42 PM
Surr: Phenol-d5	80.3	20.3-132		%REC	1	10/24/2012 8:56:42 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00236	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Toluene	0.00327	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Ethylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Xylenes, Total	0.00307	0.00164		mg/Kg	1	10/18/2012 10:33:37 PM
Methyl tert-butyl ether (MTBE)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2,4-Trimethylbenzene	0.00116	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,3,5-Trimethylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dichloroethane (EDC)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dibromoethane (EDB)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Naphthalene	ND	0.00164		mg/Kg	1	10/18/2012 10:33:37 PM
1-Methylnaphthalene	ND	0.00327		mg/Kg	1	10/18/2012 10:33:37 PM
2-Methylnaphthalene	ND	0.00327		mg/Kg	1	10/18/2012 10:33:37 PM
Acetone	0.0641	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
Bromobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Bromodichloromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Bromoform	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Bromomethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
2-Butanone	ND	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
Carbon tetrachloride	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Chlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Chloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-29 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 2:40:00 PM
Lab ID: 1210859-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Chloromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
2-Chlorotoluene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Carbon disulfide	ND	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
4-Chlorotoluene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
cis-1,2-DCE	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
cis-1,3-Dichloropropene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dibromo-3-chloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Dibromochloromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Dibromomethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,3-Dichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,4-Dichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Dichlorodifluoromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1-Dichloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1-Dichloroethene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dichloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,3-Dichloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
2,2-Dichloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1-Dichloropropene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Hexachlorobutadiene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Isopropylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
4-Isopropyltoluene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Methylene chloride	ND	0.00245		mg/Kg	1	10/18/2012 10:33:37 PM
n-Butylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
2-Hexanone	ND	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
n-Propylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
sec-Butylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Styrene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
4-Methyl-2-pentanone	ND	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
tert-Butylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1,1,2-Tetrachloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1,2,2-Tetrachloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Tetrachloroethene (PCE)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
trans-1,2-DCE	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
trans-1,3-Dichloropropene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2,3-Trichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2,4-Trichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1,1-Trichloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1,2-Trichloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Trichloroethene (TCE)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Trichlorofluoromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 1-29 (0-0.5')
Project: SWMU NO.1
Collection Date: 10/16/2012 2:40:00 PM
Lab ID: 1210859-006
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Vinyl chloride	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Surr: 1,2-Dichloroethane-d4	87.2	70-130		%REC	1	10/18/2012 10:33:37 PM
Surr: 4-Bromofluorobenzene	132	70-130	S	%REC	1	10/18/2012 10:33:37 PM
Surr: Dibromofluoromethane	99.7	70-130		%REC	1	10/18/2012 10:33:37 PM
Surr: Toluene-d8	98.6	70-130		%REC	1	10/18/2012 10:33:37 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019046
Project Name: 1210859

Analytical Results Report

Sample Number 121019046-001 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210859-001D / SWMU 1-23 (0-0.5) **Sampling Time** 12:10 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.253	10/30/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019046-002 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210859-002D / SWMU 1-39 (0-0.5) **Sampling Time** 12:35 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.259	10/30/2012	CRW	EPA 335.4	
%moisture	4.1	Percent		10/30/2012	TGT	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019046
Project Name: 1210859

Analytical Results Report

Sample Number 121019046-003 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210859-003D / SWMU 1-25 (0-0.5) **Sampling Time** 1:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.259	10/30/2012	CRW	EPA 335.4	
%moisture	3.9	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019046-004 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210859-004D / SWMU 1-25 (0.5-1) **Sampling Time** 1:15 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.268	10/30/2012	CRW	EPA 335.4	
%moisture	7.3	Percent		10/30/2012	TGT	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019046
Project Name: 1210859

Analytical Results Report

Sample Number 121019046-005 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210859-005D / SWMU 1-26 (0-0.5) **Sampling Time** 1:35 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.246	10/30/2012	CRW	EPA 335.4	
%moisture	3.8	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019046-006 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210859-006D / SWMU 1-29 (0-0.5) **Sampling Time** 2:40 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	6.05	mg/Kg	0.256	10/30/2012	CRW	EPA 335.4	
%moisture	2.8	Percent		10/30/2012	TGT	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4404** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182984** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.6	77.6	140			

Sample ID **LCS-4404** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182985** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	34	10	50.00	0	67.4	52.6	130			
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Sample ID **1210819-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183001** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	67	12	58.99	27.06	67.2	57.2	146			
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID **1210819-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183002** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	12	61.48	27.06	68.9	57.2	146	4.05	24.5	
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4474** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4474** RunNo: **6487**
Prep Date: **10/23/2012** Analysis Date: **10/25/2012** SeqNo: **187625** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		95.0	84	116			

Sample ID **LCS-4474** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4474** RunNo: **6487**
Prep Date: **10/23/2012** Analysis Date: **10/25/2012** SeqNo: **187626** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	74	117			
Surr: BFB	1000		1000		100	84	116			

Sample ID **1210A08-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4474** RunNo: **6487**
Prep Date: **10/23/2012** Analysis Date: **10/25/2012** SeqNo: **187638** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.34	11.22	90.8	70	130			
Surr: BFB	1100		973.7		117	84	116			S

Sample ID **1210A08-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4474** RunNo: **6487**
Prep Date: **10/23/2012** Analysis Date: **10/25/2012** SeqNo: **187639** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.39	11.22	89.9	70	130	0.479	22.1	
Surr: BFB	1100		975.6		115	84	116	0	0	

Sample ID **MB-4447** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4447** RunNo: **6512**
Prep Date: **10/22/2012** Analysis Date: **10/26/2012** SeqNo: **187995** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	84	116			

Sample ID **LCS-4447** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4447** RunNo: **6512**
Prep Date: **10/22/2012** Analysis Date: **10/26/2012** SeqNo: **187996** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	106	74	117			
Surr: BFB	1000		1000		103	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4393**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4393**	RunNo: **6360**			
Prep Date: **10/18/2012**	Analysis Date: **10/18/2012**	SeqNo: **182928**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4393** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4393** RunNo: **6360**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182928** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	46.1		50.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	44.8		50.00		89.6	70	130			
Surr: Dibromofluoromethane	53.0		50.00		106	70	130			
Surr: Toluene-d8	42.4		50.00		84.8	70	130			

Sample ID **lcs-4393** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4393** RunNo: **6360**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.87	1.00	10.00	0	88.7	60	140			
Toluene	8.50	1.00	10.00	0	85.0	60	140			
Chlorobenzene	9.38	1.00	10.00	0	93.8	60	140			
1,1-Dichloroethene	11.0	1.00	10.00	0	110	60	140			
Trichloroethene (TCE)	7.70	1.00	10.00	0	77.0	60	140			
Surr: 1,2-Dichloroethane-d4	44.9		50.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	40.9		50.00		81.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**lcs-4393**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4393**	RunNo:	**6360**
Prep Date:	**10/18/2012**	Analysis Date:	**10/18/2012**	SeqNo:	**182930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	50.4		50.00		101	70	130			
Surr: Toluene-d8	41.1		50.00		82.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **lcs-4422** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185414** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	74.7	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	76.9	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	75.3	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.0	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	79.3	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.1	39.1	86.9			
4-Nitrophenol	2.4	0.25	3.330	0	73.5	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	61.6	36.2	80			
Phenol	2.4	0.20	3.330	0	72.5	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.5	0.20	1.670	0	91.6	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		103	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		95.5	20	131			
Surr: 2-Fluorophenol	2.8		3.330		83.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.6	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.9	25.6	137			
Surr: Phenol-d5	3.0		3.330		89.0	20.3	132			

Sample ID **mb-4422** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4422**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4422**	RunNo: **6445**			
Prep Date: **10/19/2012**	Analysis Date: **10/23/2012**	SeqNo: **185416**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **mb-4422** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.9		3.330		117	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		98.4	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.6	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		109	25.6	137			
Surr: Phenol-d5	3.2		3.330		96.3	20.3	132			

Sample ID **1210858-004Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.659	0	69.3	25.6	142			
4-Chloro-3-methylphenol	2.2	0.50	3.309	0	67.6	63.7	100			
2-Chlorophenol	2.0	0.20	3.309	0	61.7	22.2	126			
1,4-Dichlorobenzene	1.1	0.20	1.659	0	63.6	12.4	115			
2,4-Dinitrotoluene	1.2	0.50	1.659	0	74.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	0.20	1.659	0	65.9	13.9	136			
4-Nitrophenol	2.2	0.25	3.309	0.09121	63.6	36.7	130			
Pentachlorophenol	1.9	0.40	3.309	0	56.5	15.8	113			
Phenol	2.1	0.20	3.309	0	63.9	25.1	124			
Pyrene	1.1	0.20	1.659	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.3	0.20	1.659	0	78.0	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.309		90.3	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.659		90.0	20	131			
Surr: 2-Fluorophenol	2.5		3.309		74.2	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		80.0	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.659		101	25.6	137			
Surr: Phenol-d5	2.8		3.309		84.0	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210858-004Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185434** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.681	0	71.3	25.6	142	4.05	22	
4-Chloro-3-methylphenol	2.3	0.50	3.351	0	69.5	63.7	100	4.10	27.3	
2-Chlorophenol	2.3	0.20	3.351	0	68.2	22.2	126	11.4	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.681	0	63.4	12.4	115	1.02	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.681	0	77.0	14.9	142	4.43	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.681	0	75.9	13.9	136	15.3	22.6	
4-Nitrophenol	2.3	0.25	3.351	0.09121	64.9	36.7	130	3.21	20	
Pentachlorophenol	2.0	0.40	3.351	0	59.9	15.8	113	7.18	27.1	
Phenol	2.2	0.20	3.351	0	66.5	25.1	124	5.18	32.2	
Pyrene	1.2	0.20	1.681	0	70.8	35.8	124	4.36	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.681	0	80.5	30	113	4.34	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.351		93.6	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.681		91.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.351		75.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.681		81.4	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.681		96.9	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.351		85.9	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4426** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185363** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4426** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185364** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID **1210859-002CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-39 (0-0.5')** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185391** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1654	0.01134	102	75	125			

Sample ID **1210859-002CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-39 (0-0.5')** Batch ID: **4426** RunNo: **6443**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185392** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1685	0.01134	99.0	75	125	1.06	20	

Sample ID **MB-4629** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4629** RunNo: **6634**
Prep Date: **11/1/2012** Analysis Date: **11/1/2012** SeqNo: **191517** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4629** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4629** RunNo: **6634**
Prep Date: **11/1/2012** Analysis Date: **11/1/2012** SeqNo: **191518** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID **1210859-003CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 1-25 (0-0.5')** Batch ID: **4629** RunNo: **6634**
Prep Date: **11/1/2012** Analysis Date: **11/1/2012** SeqNo: **191520** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1609	0.02890	103	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210859-003CMSD**	SampType:	**MSD**	TestCode:	**EPA Method 7471: Mercury**
Client ID:	**SWMU 1-25 (0-0.5')**	Batch ID:	**4629**	RunNo:	**6634**
Prep Date:	**11/1/2012**	Analysis Date:	**11/1/2012**	SeqNo:	**191521** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.22	0.033	0.1651	0.02890	113	75	125	10.5	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **MB-4441** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186822** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4441** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186823** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	23	2.5	25.00	0	92.2	80	120			
Arsenic	23	2.5	25.00	0	93.7	80	120			
Barium	23	0.10	25.00	0	92.2	80	120			
Beryllium	24	0.15	25.00	0	95.1	80	120			
Cadmium	23	0.10	25.00	0	92.8	80	120			
Chromium	23	0.30	25.00	0	91.8	80	120			
Cobalt	22	0.30	25.00	0	88.9	80	120			
Iron	23	1.0	25.00	0	93.7	80	120			
Lead	23	0.25	25.00	0	91.3	80	120			
Manganese	23	0.10	25.00	0.04450	90.3	80	120			
Nickel	22	0.50	25.00	0	87.6	80	120			
Selenium	22	2.5	25.00	0	87.2	80	120			
Vanadium	24	2.5	25.00	0	95.4	80	120			
Zinc	23	2.5	25.00	0	90.7	80	120			

Sample ID **1210656-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.2	5.0	24.67	0	20.9	75	125			S
Arsenic	23	5.0	24.67	2.167	85.1	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID **1210656-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	21	0.30	24.67	0.6108	83.1	75	125			
Cadmium	19	0.20	24.67	0	78.2	75	125			
Chromium	31	0.60	24.67	9.563	87.0	75	125			
Cobalt	21	0.60	24.67	3.401	71.6	75	125			S
Lead	22	0.50	24.67	4.192	72.5	75	125			S
Nickel	24	1.0	24.67	5.943	73.5	75	125			S
Selenium	11	5.0	24.67	0	43.9	75	125			S
Vanadium	41	5.0	24.67	17.94	92.0	75	125			

Sample ID **1210656-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	24.23	0	20.3	75	125	200	20	S
Arsenic	23	5.0	24.23	2.167	87.5	75	125	0.929	20	
Beryllium	21	0.30	24.23	0.6108	85.4	75	125	0.909	20	
Cadmium	20	0.20	24.23	0	82.3	75	125	3.30	20	
Chromium	30	0.60	24.23	9.563	83.1	75	125	4.37	20	
Cobalt	21	0.60	24.23	3.401	72.9	75	125	0.0820	20	S
Lead	21	0.50	24.23	4.192	70.5	75	125	3.76	20	S
Nickel	24	1.0	24.23	5.943	75.3	75	125	0.450	20	
Selenium	13	5.0	24.23	0	54.1	75	125	19.1	20	S
Vanadium	39	5.0	24.23	17.94	88.1	75	125	3.41	20	

Sample ID **MB-4441** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4441** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188994** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID **LCS-4441** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4441** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188995** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.3	0.25	5.000	0	106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210859**
13-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.1

Sample ID	**1210656-001CMS**	SampType:	**MS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**BatchQC**	Batch ID:	**4441**	RunNo:	**6598**
Prep Date:	**10/22/2012**	Analysis Date:	**10/31/2012**	SeqNo:	**190745** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.935	0	86.1	75	125			

Sample ID	**1210656-001CMSD**	SampType:	**MSD**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**BatchQC**	Batch ID:	**4441**	RunNo:	**6598**
Prep Date:	**10/22/2012**	Analysis Date:	**10/31/2012**	SeqNo:	**190746** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.847	0	87.1	75	125	0.553	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210859

Received by/date: LM 10/18/12

Logged By: **Michelle Garcia** 10/18/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/18/2012 9:07:38 AM Michelle Garcia

Reviewed By: 10/18/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH- RPS
Sampler: TRACY PAYNE- RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210859	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/16/12	1210	SOIL	SWMU 1-23(0-0.5')	2 VIALS	SOBI	-001										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1235		SWMU 1-39(0-0.5')	2 VIALS	SOBI	-002										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1300		SWMU 1-25(0-0.5')	2 VIALS	SOBI	-003										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1315		SWMU 1-25(0.5-1')	2 VIALS	SOBI	-004										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10.17.12	0725	[signature]	[signature]	10/18/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

II of II

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: SWMU No. 1
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210859	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/16/12	1335		SWMU 1-26(0-0.5')	2VIALS	SOBI	-005										X						
	↓		↓	2VIALS	MEOH											X						
				3JARS	—											X	X	X	X			
	1440		SWMU 1-29(0-0.5')	2VIALS	SOBI	-006										X						
	↓		↓	2VIALS	MEOH											X						
				3JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/17/12	0725				
Date:	Time:	Relinquished by:	Received by:	10/18/12	0800

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

SWMU 14 SOILS

METALS J-FLAGGED RESULTS

Analytical Report
Lab Order: **1207748**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207748-001C

Client Sample ID: SWMU 14-1 (0-0.5)
Collection Date: 7/16/2012 4:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	2.5	12		mg/Kg	5	7/26/2012 8:30:20 PM	2958
Arsenic	ND	0.77	12		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Barium	790	0.53	2.0		mg/Kg	20	7/25/2012 5:52:08 PM	2958
Beryllium	0.61	0.047	0.75	J	mg/Kg	5	7/26/2012 8:30:20 PM	2958
Cadmium	ND	0.11	0.50		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Chromium	6.8	0.24	1.5		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Cobalt	5.4	0.33	1.5		mg/Kg	5	7/26/2012 8:30:20 PM	2958
Iron	9000	430	500		mg/Kg	500	7/31/2012 6:15:57 PM	2958
Lead	3.6	0.98	1.2		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Manganese	570	6.4	2.0		mg/Kg	20	7/30/2012 7:33:13 PM	2958
Nickel	6.1	0.13	2.5		mg/Kg	5	7/26/2012 8:30:20 PM	2958
Selenium	ND	1.9	12		mg/Kg	5	7/30/2012 7:30:35 PM	2958
Silver	ND	0.068	1.2		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Vanadium	17	0.10	12		mg/Kg	5	7/26/2012 8:30:20 PM	2958
Zinc	21	1.9	12		mg/Kg	5	7/26/2012 8:30:20 PM	2958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207748**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207748-002C

Client Sample ID: SWMU 14-1 (1.5-2)
Collection Date: 7/16/2012 4:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	2.5	12		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Arsenic	ND	0.77	12		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Barium	550	0.53	2.0		mg/Kg	20	7/25/2012 5:54:25 PM	2958
Beryllium	0.89	0.047	0.75		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Cadmium	ND	0.11	0.50		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Chromium	11	0.24	1.5		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Cobalt	5.1	0.33	1.5		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Iron	17000	430	500		mg/Kg	500	7/31/2012 6:23:35 PM	2958
Lead	4.6	0.98	1.2		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Manganese	510	6.4	2.0		mg/Kg	20	7/30/2012 7:40:43 PM	2958
Nickel	8.3	0.13	2.5		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Selenium	ND	7.8	50		mg/Kg	20	7/30/2012 7:40:43 PM	2958
Silver	ND	0.068	1.2		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Vanadium	26	0.10	12		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Zinc	21	1.9	12		mg/Kg	5	7/26/2012 8:33:08 PM	2958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207748-003C

Client Sample ID: SWMU 14-1 (10-12)
Collection Date: 7/16/2012 4:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	2.5	12		mg/Kg	5	7/26/2012 8:35:53 PM	2958
Arsenic	ND	0.77	12		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Barium	1100	1.3	5.0		mg/Kg	50	7/25/2012 5:56:42 PM	2958
Beryllium	0.69	0.047	0.75	J	mg/Kg	5	7/26/2012 8:35:53 PM	2958
Cadmium	ND	0.11	0.50		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Chromium	11	0.24	1.5		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Cobalt	5.0	0.33	1.5		mg/Kg	5	7/26/2012 8:35:53 PM	2958
Iron	14000	430	500		mg/Kg	500	7/31/2012 6:26:11 PM	2958
Lead	2.5	0.98	1.2		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Manganese	590	6.4	2.0		mg/Kg	20	7/30/2012 7:56:33 PM	2958
Nickel	7.6	0.13	2.5		mg/Kg	5	7/26/2012 8:35:53 PM	2958
Selenium	ND	1.9	12		mg/Kg	5	7/30/2012 7:53:56 PM	2958
Silver	ND	0.068	1.2		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Vanadium	24	0.10	12		mg/Kg	5	7/26/2012 8:35:53 PM	2958
Zinc	20	1.9	12		mg/Kg	5	7/26/2012 8:35:53 PM	2958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207900**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-001C

Client Sample ID: SWMU 14-3 (0-0.5')
Collection Date: 7/18/2012 11:25:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	4.8	3.1	12	J	mg/Kg	5	8/5/2012 5:36:25 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Barium	920	3.0	5.0		mg/Kg	50	8/8/2012 10:13:35 AM	3009
Beryllium	0.77	0.046	0.75		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Chromium	11	0.59	1.5		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Cobalt	5.1	0.34	1.5		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Iron	13000	370	500		mg/Kg	500	8/8/2012 10:16:02 AM	3009
Lead	2.7	1.1	1.2		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Manganese	600	1.1	5.0		mg/Kg	50	8/8/2012 10:13:35 AM	3009
Nickel	8.0	0.83	2.5		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Vanadium	23	0.28	12		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Zinc	42	5.0	12		mg/Kg	5	8/5/2012 5:36:25 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-002C

Client Sample ID: SWMU 14-3 (1.5-2')
Collection Date: 7/18/2012 12:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	0.63	2.5		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:38:48 PM	3009
Barium	560	1.2	2.0		mg/Kg	20	8/8/2012 10:18:46 AM	3009
Beryllium	0.65	0.0093	0.15		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Cadmium	ND	0.027	0.10		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Chromium	19	0.12	0.30		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Cobalt	3.6	0.069	0.30		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Iron	11000	370	500		mg/Kg	500	8/8/2012 10:21:13 AM	3009
Lead	1.7	0.22	0.25		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Manganese	400	0.42	2.0		mg/Kg	20	8/8/2012 10:18:46 AM	3009
Nickel	6.0	0.17	0.50		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Selenium	ND	1.4	2.5		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Silver	ND	0.035	0.25		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Vanadium	18	0.056	2.5		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Zinc	42	5.0	12		mg/Kg	5	8/5/2012 5:38:48 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-003C

Client Sample ID: SWMU 14-3 (8-10')
Collection Date: 7/18/2012 12:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Barium	380	1.2	2.0		mg/Kg	20	8/8/2012 10:23:59 AM	3009
Beryllium	0.80	0.046	0.75		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Chromium	100	0.59	1.5		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Cobalt	5.6	0.34	1.5		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Iron	14000	370	500		mg/Kg	500	8/8/2012 10:26:26 AM	3009
Lead	11	1.1	1.2		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Manganese	350	0.42	2.0		mg/Kg	20	8/8/2012 10:23:59 AM	3009
Nickel	9.3	0.83	2.5		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Vanadium	29	0.28	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Zinc	67	5.0	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207900**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-004C

Client Sample ID: SWMU 14-3 (12-14')
Collection Date: 7/18/2012 12:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Barium	350	1.2	2.0		mg/Kg	20	8/8/2012 10:39:57 AM	3009
Beryllium	0.67	0.046	0.75	J	mg/Kg	5	8/5/2012 5:43:34 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Chromium	110	0.59	1.5		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Cobalt	4.9	0.34	1.5		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Iron	14000	370	500		mg/Kg	500	8/8/2012 10:42:25 AM	3009
Lead	12	1.1	1.2		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Manganese	570	0.42	2.0		mg/Kg	20	8/8/2012 10:39:57 AM	3009
Nickel	8.5	0.83	2.5		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Vanadium	31	0.28	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Zinc	65	5.0	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207900**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-005C

Client Sample ID: SWMU 14-3 (25.5-26')
Collection Date: 7/18/2012 12:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Barium	630	3.0	5.0		mg/Kg	50	8/8/2012 10:45:10 AM	3009
Beryllium	1.1	0.046	0.75		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Chromium	17	0.59	1.5		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Cobalt	10	0.34	1.5		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Iron	21000	370	500		mg/Kg	500	8/8/2012 10:47:34 AM	3009
Lead	ND	1.1	1.2		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Manganese	1400	1.1	5.0		mg/Kg	50	8/8/2012 10:45:10 AM	3009
Nickel	17	0.83	2.5		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Vanadium	24	0.28	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Zinc	34	5.0	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-006C

Client Sample ID: SWMU 14-1 (48-50')
Collection Date: 7/18/2012 1:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Barium	750	3.0	5.0		mg/Kg	50	8/8/2012 10:50:18 AM	3009
Beryllium	1.4	0.046	0.75		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Chromium	20	0.59	1.5		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Cobalt	6.7	0.34	1.5		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Iron	23000	370	500		mg/Kg	500	8/8/2012 10:52:45 AM	3009
Lead	2.0	1.1	1.2		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Manganese	720	1.1	5.0		mg/Kg	50	8/8/2012 10:50:18 AM	3009
Nickel	16	0.83	2.5		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Vanadium	9.8	0.28	12	J	mg/Kg	5	8/5/2012 5:48:24 PM	3009
Zinc	23	5.0	12		mg/Kg	5	8/5/2012 5:48:24 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207917**
Date Reported: **8/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-001C

Client Sample ID: SWMU 14-4 (0-0.5')
Collection Date: 7/17/2012 1:18:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	0.63	2.5		mg/Kg	1	8/9/2012 5:34:54 AM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:54:51 PM	3009
Barium	870	1.2	2.0		mg/Kg	20	8/8/2012 10:55:27 AM	3009
Beryllium	0.33	0.0093	0.15		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Cadmium	ND	0.027	0.10		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Chromium	3.4	0.12	0.30		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Cobalt	2.5	0.069	0.30		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Iron	3200	75	100		mg/Kg	100	8/8/2012 10:57:55 AM	3009
Lead	ND	0.22	0.25		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Manganese	320	0.42	2.0		mg/Kg	20	8/8/2012 10:55:27 AM	3009
Nickel	3.1	0.17	0.50		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Selenium	ND	1.4	2.5		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Silver	ND	0.035	0.25		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Vanadium	17	0.056	2.5		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Zinc	8.3	1.0	2.5		mg/Kg	1	8/5/2012 7:25:13 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207917**
Date Reported: **8/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-002C

Client Sample ID: SWMU 14-4 (1.5-2.0')
Collection Date: 7/17/2012 1:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	0.63	2.5		mg/Kg	1	8/9/2012 5:37:28 AM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 6:05:34 PM	3009
Barium	870	1.2	2.0		mg/Kg	20	8/8/2012 11:00:44 AM	3009
Beryllium	0.51	0.0093	0.15		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Cadmium	ND	0.027	0.10		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Chromium	5.2	0.12	0.30		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Cobalt	2.7	0.069	0.30		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Iron	7500	370	500		mg/Kg	500	8/8/2012 11:04:52 AM	3009
Lead	0.37	0.22	0.25		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Manganese	340	0.42	2.0		mg/Kg	20	8/8/2012 11:00:44 AM	3009
Nickel	4.4	0.17	0.50		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Selenium	ND	1.4	2.5		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Silver	ND	0.035	0.25		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Vanadium	13	0.056	2.5		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Zinc	10	1.0	2.5		mg/Kg	1	8/5/2012 7:27:43 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207917**
Date Reported: **8/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-003C

Client Sample ID: SWMU 14-4 (10-12')
Collection Date: 7/17/2012 2:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Barium	460	1.2	2.0		mg/Kg	20	8/8/2012 11:18:39 AM	3009
Beryllium	0.86	0.046	0.75		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Chromium	12	0.59	1.5		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Cobalt	5.0	0.34	1.5		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Iron	16000	370	500		mg/Kg	500	8/8/2012 11:21:06 AM	3009
Lead	2.4	1.1	1.2		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Manganese	720	0.42	2.0		mg/Kg	20	8/8/2012 11:18:39 AM	3009
Nickel	8.6	0.83	2.5		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Vanadium	25	0.28	12		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Zinc	22	5.0	12		mg/Kg	5	8/10/2012 5:27:11 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-004C

Client Sample ID: SWMU 14-4 (19.5-20')
Collection Date: 7/17/2012 2:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Barium	480	3.0	5.0		mg/Kg	50	8/8/2012 11:23:48 AM	3009
Beryllium	1.3	0.046	0.75		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Chromium	22	0.59	1.5		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Cobalt	8.0	0.34	1.5		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Iron	23000	370	500		mg/Kg	500	8/8/2012 11:26:15 AM	3009
Lead	1.4	1.1	1.2		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Manganese	1000	1.1	5.0		mg/Kg	50	8/8/2012 11:23:48 AM	3009
Nickel	17	0.83	2.5		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Vanadium	15	0.28	12		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Zinc	25	5.0	12		mg/Kg	5	8/10/2012 5:31:16 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207917**
Date Reported: **8/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-005C

Client Sample ID: SWMU 14-2 (0-0.5')
Collection Date: 7/17/2012 4:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	4.0	3.1	13	J	mg/Kg	5	8/10/2012 5:33:46 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Barium	700	1.2	2.0		mg/Kg	20	8/8/2012 11:28:59 AM	3009
Beryllium	0.68	0.046	0.75	J	mg/Kg	5	8/5/2012 6:12:43 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Chromium	8.8	0.59	1.5		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Cobalt	4.4	0.34	1.5		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Iron	14000	370	500		mg/Kg	500	8/8/2012 11:31:24 AM	3009
Lead	3.3	1.1	1.2		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Manganese	510	0.42	2.0		mg/Kg	20	8/8/2012 11:28:59 AM	3009
Nickel	6.2	0.83	2.5		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/8/2012 11:55:49 AM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Vanadium	31	0.28	12		mg/Kg	5	8/8/2012 11:55:49 AM	3009
Zinc	17	5.0	13		mg/Kg	5	8/10/2012 5:33:46 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-006C

Client Sample ID: SWMU 14-2 (1.5-2.0')
Collection Date: 7/17/2012 4:24:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	3.6	3.1	13	J	mg/Kg	5	8/10/2012 5:43:48 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Barium	470	3.0	5.0		mg/Kg	50	8/10/2012 6:04:10 PM	3107
Beryllium	0.76	0.047	0.75		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Chromium	12	0.59	1.5		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Cobalt	3.8	0.34	1.5		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Iron	11000	370	500		mg/Kg	500	8/10/2012 6:06:36 PM	3107
Lead	4.4	1.1	1.3		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Manganese	530	1.1	5.0		mg/Kg	50	8/10/2012 6:04:10 PM	3107
Nickel	7.3	0.83	2.5		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Vanadium	21	0.28	13		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Zinc	35	5.0	13		mg/Kg	5	8/10/2012 5:43:48 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-007C

Client Sample ID: SWMU 14-2 (8-10')
Collection Date: 7/17/2012 4:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	0.82	0.63	2.5	J	mg/Kg	1	8/10/2012 8:35:35 PM	3107
Arsenic	1.6	0.63	2.5	J	mg/Kg	1	8/10/2012 8:35:35 PM	3107
Barium	400	3.0	5.0		mg/Kg	50	8/10/2012 6:11:40 PM	3107
Beryllium	0.58	0.0093	0.15		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Cadmium	ND	0.027	0.10		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Chromium	76	0.59	1.5		mg/Kg	5	8/10/2012 6:09:14 PM	3107
Cobalt	3.7	0.069	0.30		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Iron	14000	370	500		mg/Kg	500	8/10/2012 6:14:05 PM	3107
Lead	4.6	0.22	0.25		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Manganese	400	1.1	5.0		mg/Kg	50	8/10/2012 6:11:40 PM	3107
Nickel	6.6	0.17	0.50		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Selenium	ND	1.4	2.5		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Silver	ND	0.035	0.25		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Vanadium	20	0.057	2.5		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Zinc	37	1.0	2.5		mg/Kg	1	8/10/2012 8:35:35 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-009C

Client Sample ID: SWMU 14-2 (16-18')
Collection Date: 7/17/2012 5:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	4.7	3.1	13	J	mg/Kg	5	8/10/2012 6:32:52 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Barium	520	3.0	5.0		mg/Kg	50	8/10/2012 6:36:56 PM	3107
Beryllium	1.3	0.047	0.75		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Chromium	18	0.59	1.5		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Cobalt	7.2	0.34	1.5		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Iron	26000	750	1000		mg/Kg	1000	8/15/2012 7:08:47 AM	3107
Lead	1.2	1.1	1.3	J	mg/Kg	5	8/10/2012 6:32:52 PM	3107
Manganese	1100	1.1	5.0		mg/Kg	50	8/10/2012 6:36:56 PM	3107
Nickel	16	0.83	2.5		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Vanadium	22	0.28	13		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Zinc	26	5.0	13		mg/Kg	5	8/10/2012 6:32:52 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-010C

Client Sample ID: SWMU 14-2 (24-25')
Collection Date: 7/17/2012 5:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	3.3	3.1	13	J	mg/Kg	5	8/10/2012 6:41:43 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Barium	460	3.0	5.0		mg/Kg	50	8/10/2012 6:44:11 PM	3107
Beryllium	1.1	0.047	0.75		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Chromium	18	0.59	1.5		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Cobalt	9.7	0.34	1.5		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Iron	19000	370	500		mg/Kg	500	8/10/2012 6:46:36 PM	3107
Lead	ND	1.1	1.3		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Manganese	980	1.1	5.0		mg/Kg	50	8/10/2012 6:44:11 PM	3107
Nickel	17	0.83	2.5		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Vanadium	52	0.28	13		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Zinc	31	5.0	13		mg/Kg	5	8/10/2012 6:41:43 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207922**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-001C

Client Sample ID: SMWU 14-9 (0-0.5')
Collection Date: 7/18/2012 4:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Arsenic	ND	3.1	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Barium	480	3.0	5.0		mg/Kg	50	8/10/2012 6:52:46 PM	3107
Beryllium	0.58	0.046	0.75	J	mg/Kg	5	8/10/2012 6:49:12 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Chromium	13	0.59	1.5		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Cobalt	3.8	0.34	1.5		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Iron	14000	370	500		mg/Kg	500	8/10/2012 6:55:13 PM	3107
Lead	5.5	1.1	1.2		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Manganese	1800	1.1	5.0		mg/Kg	50	8/10/2012 6:52:46 PM	3107
Nickel	6.3	0.83	2.5		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Selenium	ND	7.0	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Silver	ND	0.18	1.2		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Vanadium	18	0.28	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Zinc	44	5.0	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-002C

Client Sample ID: SMWU 14-9 (0-0.5') Dup
Collection Date: 7/18/2012 4:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Arsenic	ND	3.1	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Barium	490	3.0	5.0		mg/Kg	50	8/10/2012 7:10:33 PM	3107
Beryllium	1.0	0.046	0.75		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Chromium	22	0.59	1.5		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Cobalt	5.9	0.34	1.5		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Iron	18000	370	500		mg/Kg	500	8/10/2012 7:12:57 PM	3107
Lead	40	1.1	1.2		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Manganese	460	1.1	5.0		mg/Kg	50	8/10/2012 7:10:33 PM	3107
Nickel	11	0.83	2.5		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Selenium	ND	7.0	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Silver	ND	0.18	1.2		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Vanadium	29	0.28	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Zinc	57	5.0	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207922**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-003C

Client Sample ID: SMWU 14-9 (1.5-2')
Collection Date: 7/18/2012 4:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Arsenic	ND	3.1	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Barium	500	3.0	5.0		mg/Kg	50	8/10/2012 7:17:59 PM	3107
Beryllium	0.52	0.046	0.75	J	mg/Kg	5	8/10/2012 7:15:32 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Chromium	10	0.59	1.5		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Cobalt	3.1	0.34	1.5		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Iron	8800	370	500		mg/Kg	500	8/10/2012 7:20:23 PM	3107
Lead	1.9	1.1	1.2		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Manganese	930	1.1	5.0		mg/Kg	50	8/10/2012 7:17:59 PM	3107
Nickel	5.9	0.83	2.5		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Selenium	ND	7.0	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Silver	ND	0.18	1.2		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Vanadium	19	0.28	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Zinc	28	5.0	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-004C

Client Sample ID: SMWU 14-9 (4-6')
Collection Date: 7/18/2012 4:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Barium	200	0.30	0.50		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Beryllium	1.1	0.047	0.75		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Chromium	12	0.59	1.5		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Cobalt	4.9	0.34	1.5		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Iron	16000	370	500		mg/Kg	500	8/10/2012 7:27:49 PM	3107
Lead	2.4	1.1	1.3		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Manganese	280	1.1	5.0		mg/Kg	50	8/10/2012 7:25:24 PM	3107
Nickel	8.5	0.83	2.5		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Vanadium	20	0.28	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Zinc	17	5.0	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207922**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-005C

Client Sample ID: SMWU 14-9 (13-14')
Collection Date: 7/18/2012 5:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	4.5	3.1	13	J	mg/Kg	5	8/10/2012 7:30:27 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Barium	190	0.30	0.50		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Beryllium	1.3	0.047	0.75		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Chromium	19	0.59	1.5		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Cobalt	6.5	0.34	1.5		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Iron	23000	370	500		mg/Kg	500	8/10/2012 7:45:36 PM	3107
Lead	ND	1.1	1.3		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Manganese	460	1.1	5.0		mg/Kg	50	8/10/2012 7:32:53 PM	3107
Nickel	13	0.83	2.5		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Vanadium	29	0.28	13		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Zinc	27	5.0	13		mg/Kg	5	8/10/2012 7:30:27 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-006C

Client Sample ID: SMWU 14-7 (0-0.5')
Collection Date: 7/18/2012 6:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	5.3	3.1	13	J	mg/Kg	5	8/10/2012 7:48:14 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Barium	650	3.0	5.0		mg/Kg	50	8/10/2012 7:50:38 PM	3107
Beryllium	0.76	0.047	0.75		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Chromium	9.6	0.59	1.5		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Cobalt	4.1	0.34	1.5		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Iron	15000	370	500		mg/Kg	500	8/10/2012 7:53:02 PM	3107
Lead	3.5	1.1	1.3		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Manganese	600	1.1	5.0		mg/Kg	50	8/10/2012 7:50:38 PM	3107
Nickel	6.8	0.83	2.5		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Vanadium	22	0.28	13		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Zinc	30	5.0	13		mg/Kg	5	8/10/2012 7:48:14 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **1207922**
Date Reported: **8/29/2012**

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-007C

Client Sample ID: SMWU 14-7 (1.5-2')
Collection Date: 7/18/2012 6:50:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	ND	3.1	13		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Barium	550	3.0	5.0		mg/Kg	50	8/10/2012 7:58:01 PM	3107
Beryllium	0.68	0.047	0.75	J	mg/Kg	5	8/10/2012 7:55:37 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Chromium	7.1	0.59	1.5		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Cobalt	3.7	0.34	1.5		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Iron	11000	370	500		mg/Kg	500	8/10/2012 8:00:26 PM	3107
Lead	3.2	1.1	1.3		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Manganese	1100	1.1	5.0		mg/Kg	50	8/10/2012 7:58:01 PM	3107
Nickel	5.6	0.83	2.5		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Vanadium	18	0.28	13		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Zinc	12	5.0	13	J	mg/Kg	5	8/10/2012 7:55:37 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **1207922**
Date Reported: **8/29/2012**

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-008C

Client Sample ID: SMWU 14-7 (6-8')
Collection Date: 7/18/2012 7:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	4.6	3.1	13	J	mg/Kg	5	8/10/2012 8:03:02 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Barium	2400	3.0	5.0		mg/Kg	50	8/10/2012 8:05:24 PM	3107
Beryllium	1.2	0.047	0.75		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Chromium	14	0.59	1.5		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Cobalt	6.0	0.34	1.5		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Iron	20000	370	500		mg/Kg	500	8/10/2012 8:07:51 PM	3107
Lead	2.6	1.1	1.3		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Manganese	400	1.1	5.0		mg/Kg	50	8/10/2012 8:05:24 PM	3107
Nickel	11	0.83	2.5		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Vanadium	27	0.28	13		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Zinc	22	5.0	13		mg/Kg	5	8/10/2012 8:03:02 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-009C

Client Sample ID: SMWU 14-7 (23.5-24')
Collection Date: 7/18/2012 7:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **ELS**	
Antimony	4.5	3.1	13	J	mg/Kg	5	8/10/2012 8:22:31 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Barium	350	3.0	5.0		mg/Kg	50	8/10/2012 8:24:57 PM	3107
Beryllium	1.2	0.047	0.75		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Chromium	17	0.59	1.5		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Cobalt	7.6	0.34	1.5		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Iron	21000	370	500		mg/Kg	500	8/22/2012 7:45:41 AM	3107
Lead	ND	1.1	1.3		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Manganese	740	1.1	5.0		mg/Kg	50	8/10/2012 8:24:57 PM	3107
Nickel	16	0.83	2.5		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Vanadium	16	0.28	13		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Zinc	25	5.0	13		mg/Kg	5	8/10/2012 8:22:31 PM	3107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207940**
Date Reported: **9/7/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-001C

Client Sample ID: SWMU 14-10 (0-0.5')
Collection Date: 7/19/2012 11:00:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	3.3	3.1	12	J	mg/Kg	5	8/1/2012 2:33:40 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Barium	430	3.0	5.0		mg/Kg	50	8/5/2012 12:52:36 PM	3008
Beryllium	0.89	0.046	0.75		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:33:40 PM	3008
Chromium	23	0.59	1.5		mg/Kg	5	8/1/2012 2:33:40 PM	3008
Cobalt	5.4	0.34	1.5		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 12:54:47 PM	3008
Lead	7.7	1.1	1.2		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Manganese	510	1.1	5.0		mg/Kg	50	8/5/2012 12:52:36 PM	3008
Nickel	9.3	0.83	2.5		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:33:40 PM	3008
Vanadium	25	0.28	12		mg/Kg	5	8/1/2012 2:33:40 PM	3008
Zinc	49	5.0	12		mg/Kg	5	8/4/2012 3:32:50 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207940**
Date Reported: **9/7/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-002C

Client Sample ID: SWMU 14-10 (1.5-2.0')
Collection Date: 7/19/2012 11:05:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Barium	430	3.0	5.0		mg/Kg	50	8/5/2012 12:57:26 PM	3008
Beryllium	0.83	0.046	0.75		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Chromium	23	0.59	1.5		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Cobalt	5.1	0.34	1.5		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Iron	14000	370	500		mg/Kg	500	8/5/2012 12:59:38 PM	3008
Lead	6.8	1.1	1.2		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Manganese	530	1.1	5.0		mg/Kg	50	8/5/2012 12:57:26 PM	3008
Nickel	8.8	0.83	2.5		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Vanadium	23	0.28	12		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Zinc	43	5.0	12		mg/Kg	5	8/4/2012 3:35:11 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1207940**
Date Reported: **9/7/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-003C

Client Sample ID: SWMU 14-8 (0-0.5')
Collection Date: 7/19/2012 11:27:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	4.5	3.1	12	J	mg/Kg	5	8/1/2012 2:43:53 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Barium	610	3.0	5.0		mg/Kg	50	8/5/2012 1:02:12 PM	3008
Beryllium	0.77	0.046	0.75		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:43:53 PM	3008
Chromium	16	0.59	1.5		mg/Kg	5	8/1/2012 2:43:53 PM	3008
Cobalt	5.0	0.34	1.5		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 1:14:21 PM	3008
Lead	6.2	1.1	1.2		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Manganese	470	1.1	5.0		mg/Kg	50	8/5/2012 1:02:12 PM	3008
Nickel	7.4	0.83	2.5		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:43:53 PM	3008
Vanadium	25	0.28	12		mg/Kg	5	8/1/2012 2:43:53 PM	3008
Zinc	33	5.0	12		mg/Kg	5	8/4/2012 3:37:35 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-004C

Client Sample ID: SWMU 14-8 (1.5-2.0')
Collection Date: 7/19/2012 11:40:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Barium	690	30	50		mg/Kg	500	8/5/2012 1:16:54 PM	3008
Beryllium	0.88	0.046	0.75		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Chromium	10	0.59	1.5		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Cobalt	4.7	0.34	1.5		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Iron	13000	370	500		mg/Kg	500	8/5/2012 1:16:54 PM	3008
Lead	5.0	1.1	1.2		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Manganese	190	0.11	0.50		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Nickel	7.9	0.83	2.5		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Vanadium	18	0.28	12		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Zinc	15	5.0	12		mg/Kg	5	8/4/2012 3:39:56 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-005C

Client Sample ID: SWMU 14-8 (1.5-2.0') DUP
Collection Date: 7/19/2012 11:40:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Barium	410	6.1	10		mg/Kg	100	8/5/2012 1:21:10 PM	3008
Beryllium	0.93	0.046	0.75		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Chromium	11	0.59	1.5		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Cobalt	5.0	0.34	1.5		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Iron	14000	370	500		mg/Kg	500	8/5/2012 1:23:20 PM	3008
Lead	3.7	1.1	1.2		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Manganese	210	0.11	0.50		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Nickel	8.5	0.83	2.5		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Vanadium	21	0.28	12		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Zinc	17	5.0	12		mg/Kg	5	8/4/2012 3:42:19 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-006C

Client Sample ID: SWMU 14-12 (0-0.5')
Collection Date: 7/19/2012 12:05:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Barium	150	0.30	0.50		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Beryllium	1.0	0.046	0.75		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Chromium	12	0.59	1.5		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Cobalt	5.9	0.34	1.5		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 1:25:53 PM	3008
Lead	4.4	1.1	1.2		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Manganese	240	0.11	0.50		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Nickel	9.8	0.83	2.5		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Vanadium	23	0.28	12		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Zinc	18	5.0	12		mg/Kg	5	8/4/2012 3:44:40 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-007C

Client Sample ID: SWMU 14-12 (1.5-2.0')
Collection Date: 7/19/2012 12:12:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Barium	120	0.30	0.50		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Beryllium	0.95	0.046	0.75		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Chromium	12	0.59	1.5		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Cobalt	5.3	0.34	1.5		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 1:38:51 PM	3008
Lead	2.6	1.1	1.2		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Manganese	300	2.1	10		mg/Kg	100	8/5/2012 1:36:26 PM	3008
Nickel	8.7	0.83	2.5		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Vanadium	22	0.28	12		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Zinc	18	5.0	12		mg/Kg	5	8/4/2012 3:47:03 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-008C

Client Sample ID: SWMU 14-13 (0-0.5')
Collection Date: 7/19/2012 12:36:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Barium	350	6.1	10		mg/Kg	100	8/5/2012 1:41:23 PM	3008
Beryllium	0.97	0.046	0.75		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Chromium	17	0.59	1.5		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Cobalt	5.7	0.34	1.5		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Iron	8400	370	500		mg/Kg	500	8/5/2012 1:43:37 PM	3008
Lead	2.0	1.1	1.2		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Manganese	340	2.1	10		mg/Kg	100	8/5/2012 1:41:23 PM	3008
Nickel	9.1	0.83	2.5		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Vanadium	26	0.28	12		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Zinc	36	5.0	12		mg/Kg	5	8/4/2012 3:49:23 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-009C

Client Sample ID: SWMU 14-13 (1.5-2.0')
Collection Date: 7/19/2012 12:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Barium	230	0.30	0.50		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Beryllium	1.0	0.046	0.75		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Chromium	13	0.59	1.5		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Cobalt	5.7	0.34	1.5		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Iron	16000	370	500		mg/Kg	500	8/5/2012 1:48:51 PM	3008
Lead	3.3	1.1	1.2		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Manganese	390	2.1	10		mg/Kg	100	8/5/2012 1:46:28 PM	3008
Nickel	9.5	0.83	2.5		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Vanadium	23	0.28	12		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Zinc	19	5.0	12		mg/Kg	5	8/4/2012 4:01:53 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-010C

Client Sample ID: SWMU 14-14 (0-0.5')
Collection Date: 7/19/2012 1:07:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Barium	980	6.1	10		mg/Kg	100	8/5/2012 1:51:24 PM	3008
Beryllium	0.93	0.046	0.75		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Chromium	18	0.59	1.5		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Cobalt	5.7	0.34	1.5		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Iron	16000	370	500		mg/Kg	500	8/5/2012 1:55:14 PM	3008
Lead	3.3	1.1	1.2		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Manganese	350	2.1	10		mg/Kg	100	8/5/2012 1:51:24 PM	3008
Nickel	9.1	0.83	2.5		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Vanadium	27	0.28	12		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Zinc	34	5.0	12		mg/Kg	5	8/4/2012 4:04:15 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-011C

Client Sample ID: SWMU 14-14 (1.5-2.0')
Collection Date: 7/19/2012 1:12:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Barium	190	0.30	0.50		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Beryllium	1.0	0.047	0.75		mg/kg	5	8/15/2012 8:29:04 AM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Chromium	11	0.59	1.5		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Cobalt	4.9	0.34	1.5		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Iron	14000	370	500		mg/Kg	500	8/5/2012 1:57:49 PM	3008
Lead	2.9	1.1	1.2		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Manganese	240	0.11	0.50		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Nickel	8.1	0.83	2.5		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Vanadium	21	0.28	12		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Zinc	19	5.0	12		mg/Kg	5	8/4/2012 4:06:36 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-012C

Client Sample ID: SWMU 14-11 (0-0.5')
Collection Date: 7/19/2012 1:33:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Barium	590	1.2	2.0		mg/Kg	20	8/5/2012 2:00:21 PM	3008
Beryllium	0.83	0.047	0.75		mg/kg	5	8/15/2012 8:33:02 AM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Chromium	21	0.59	1.5		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Cobalt	5.4	0.34	1.5		mg/Kg	5	8/4/2012 4:09:00 PM	3008
Iron	14000	370	500		mg/Kg	500	8/5/2012 2:10:31 PM	3008
Lead	7.0	1.1	1.2		mg/Kg	5	8/4/2012 4:09:00 PM	3008
Manganese	550	0.42	2.0		mg/Kg	20	8/5/2012 2:00:21 PM	3008
Nickel	9.7	0.83	2.5		mg/Kg	5	8/4/2012 4:09:00 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:09:00 PM	3008
Vanadium	25	0.28	12		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Zinc	59	5.0	12		mg/Kg	5	8/4/2012 4:09:00 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **1207940**
Date Reported: **9/7/2012**

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-013C

Client Sample ID: SWMU 14-11 (1.5-2.0')
Collection Date: 7/19/2012 1:38:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Barium	620	1.2	2.0		mg/Kg	20	8/5/2012 2:13:07 PM	3008
Beryllium	0.84	0.046	0.75		mg/kg	5	8/15/2012 8:36:01 AM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Chromium	17	0.59	1.5		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Cobalt	4.9	0.34	1.5		mg/Kg	5	8/4/2012 4:11:21 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 2:15:18 PM	3008
Lead	5.8	1.1	1.2		mg/Kg	5	8/4/2012 4:11:21 PM	3008
Manganese	700	0.42	2.0		mg/Kg	20	8/5/2012 2:13:07 PM	3008
Nickel	7.9	0.83	2.5		mg/Kg	5	8/4/2012 4:11:21 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:11:21 PM	3008
Vanadium	24	0.28	12		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Zinc	38	5.0	12		mg/Kg	5	8/4/2012 4:11:21 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-014C

Client Sample ID: SWMU 14-18 (0-0.5')
Collection Date: 7/19/2012 2:08:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Barium	620	1.2	2.0		mg/Kg	20	8/5/2012 2:17:56 PM	3008
Beryllium	0.86	0.046	0.75		mg/kg	5	8/15/2012 8:38:55 AM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Chromium	25	0.59	1.5		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Cobalt	5.2	0.34	1.5		mg/Kg	5	8/4/2012 4:13:45 PM	3008
Iron	16000	370	500		mg/Kg	500	8/5/2012 2:20:11 PM	3008
Lead	10	1.1	1.2		mg/Kg	5	8/4/2012 4:13:45 PM	3008
Manganese	580	0.42	2.0		mg/Kg	20	8/5/2012 2:17:56 PM	3008
Nickel	8.5	0.83	2.5		mg/Kg	5	8/4/2012 4:13:45 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:13:45 PM	3008
Vanadium	30	0.28	12		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Zinc	68	5.0	12		mg/Kg	5	8/4/2012 4:13:45 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-015C

Client Sample ID: SWMU 14-18 (1.5-2.0')
Collection Date: 7/19/2012 2:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Barium	680	1.2	2.0		mg/Kg	20	8/5/2012 2:22:47 PM	3008
Beryllium	0.76	0.046	0.75		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Chromium	26	0.59	1.5		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Cobalt	5.5	0.34	1.5		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 2:24:54 PM	3008
Lead	14	1.1	1.2		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Manganese	540	0.42	2.0		mg/Kg	20	8/5/2012 2:22:47 PM	3008
Nickel	8.9	0.83	2.5		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Vanadium	26	0.28	12		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Zinc	65	5.0	12		mg/Kg	5	8/4/2012 4:16:06 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-016C

Client Sample ID: SWMU 14-5 (0-0.5')
Collection Date: 7/19/2012 3:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Barium	490	1.2	2.0		mg/Kg	20	8/5/2012 2:29:09 PM	3008
Beryllium	0.68	0.046	0.75	J	mg/Kg	5	8/4/2012 4:18:27 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Chromium	63	0.59	1.5		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Cobalt	5.3	0.34	1.5		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Iron	18000	370	500		mg/Kg	500	8/5/2012 2:31:23 PM	3008
Lead	14	1.1	1.2		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Manganese	550	0.42	2.0		mg/Kg	20	8/5/2012 2:29:09 PM	3008
Nickel	9.8	0.83	2.5		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Vanadium	26	0.28	12		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Zinc	190	5.0	12		mg/Kg	5	8/4/2012 4:18:27 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-017C

Client Sample ID: SWMU 14-5 (0-0.5') DUP
Collection Date: 7/19/2012 3:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Barium	460	1.2	2.0		mg/Kg	20	8/5/2012 2:33:58 PM	3008
Beryllium	0.53	0.046	0.75	J	mg/Kg	5	8/4/2012 4:20:48 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Chromium	29	0.59	1.5		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Cobalt	3.9	0.34	1.5		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Iron	12000	370	500		mg/Kg	500	8/5/2012 2:44:11 PM	3008
Lead	9.9	1.1	1.2		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Manganese	870	0.42	2.0		mg/Kg	20	8/5/2012 2:33:58 PM	3008
Nickel	7.1	0.83	2.5		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Vanadium	19	0.28	12		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Zinc	160	5.0	12		mg/Kg	5	8/4/2012 4:20:48 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-018C

Client Sample ID: SWMU 14-5 (1.5-2.0')
Collection Date: 7/19/2012 3:06:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	3.4	3.1	12	J	mg/Kg	5	8/1/2012 4:30:33 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Barium	340	1.2	2.0		mg/Kg	20	8/5/2012 2:46:45 PM	3008
Beryllium	0.61	0.046	0.75	J	mg/Kg	5	8/4/2012 4:23:19 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:30:33 PM	3008
Chromium	11	0.59	1.5		mg/Kg	5	8/1/2012 4:30:33 PM	3008
Cobalt	4.6	0.34	1.5		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Iron	13000	370	500		mg/Kg	500	8/5/2012 2:48:56 PM	3008
Lead	2.5	1.1	1.2		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Manganese	450	0.42	2.0		mg/Kg	20	8/5/2012 2:46:45 PM	3008
Nickel	7.1	0.83	2.5		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:30:33 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Vanadium	26	0.28	12		mg/Kg	5	8/1/2012 4:30:33 PM	3008
Zinc	20	5.0	12		mg/Kg	5	8/4/2012 4:23:19 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-019C

Client Sample ID: SWMU 14-19 (0-0.5')
Collection Date: 7/19/2012 3:26:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Barium	180	0.30	0.50		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Beryllium	0.38	0.046	0.75	J	mg/Kg	5	8/4/2012 4:37:38 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Chromium	6.6	0.59	1.5		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Cobalt	3.2	0.34	1.5		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Iron	8200	370	500		mg/kg	500	8/15/2012 8:55:15 AM	3008
Lead	2.2	1.1	1.2		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Manganese	300	0.42	2.0		mg/kg	20	8/15/2012 8:41:50 AM	3008
Nickel	6.9	0.83	2.5		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Vanadium	22	0.28	12		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Zinc	18	5.0	12		mg/Kg	5	8/4/2012 4:37:38 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-020C

Client Sample ID: SWMU 14-19 (1.5-2.0')
Collection Date: 7/19/2012 3:33:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Barium	790	3.0	5.0		mg/kg	50	8/18/2012 11:41:55 AM	3008
Beryllium	0.81	0.046	0.75		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Chromium	12	0.59	1.5		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Cobalt	4.8	0.34	1.5		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Iron	12000	370	500		mg/kg	500	8/18/2012 11:44:19 AM	3008
Lead	4.1	1.1	1.2		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Manganese	640	1.1	5.0		mg/kg	50	8/18/2012 11:41:55 AM	3008
Nickel	8.0	0.83	2.5		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Vanadium	21	0.28	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Zinc	34	5.0	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-021C

Client Sample ID: SWMU 14-17 (0-0.5')
Collection Date: 7/19/2012 4:11:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Barium	850	3.0	5.0		mg/Kg	50	8/6/2012 4:20:43 PM	3009
Beryllium	0.86	0.046	0.75		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Chromium	20	0.59	1.5		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Cobalt	5.4	0.34	1.5		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Iron	17000	370	500		mg/Kg	500	8/6/2012 4:23:05 PM	3009
Lead	7.1	1.1	1.2		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Manganese	560	1.1	5.0		mg/Kg	50	8/6/2012 4:20:43 PM	3009
Nickel	12	0.83	2.5		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Vanadium	28	0.28	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Zinc	230	5.0	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-022C

Client Sample ID: SWMU 14-17 (1.5-2.0')
Collection Date: 7/19/2012 4:18:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Barium	600	3.0	5.0		mg/Kg	50	8/8/2012 9:31:51 AM	3009
Beryllium	0.87	0.046	0.75		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Chromium	25	0.59	1.5		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Cobalt	5.4	0.34	1.5		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Iron	15000	370	500		mg/Kg	500	8/8/2012 9:34:20 AM	3009
Lead	3.2	1.1	1.2		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Manganese	640	1.1	5.0		mg/Kg	50	8/8/2012 9:31:51 AM	3009
Nickel	8.7	0.83	2.5		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Vanadium	27	0.28	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Zinc	37	5.0	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-023C

Client Sample ID: SWMU 14-16 (0-0.5')
Collection Date: 7/19/2012 4:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Barium	550	3.0	5.0		mg/Kg	50	8/8/2012 9:37:03 AM	3009
Beryllium	0.62	0.046	0.75	J	mg/Kg	5	8/5/2012 5:11:50 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Chromium	13	0.59	1.5		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Cobalt	4.4	0.34	1.5		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Iron	11000	370	500		mg/Kg	500	8/8/2012 9:39:29 AM	3009
Lead	4.8	1.1	1.2		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Manganese	1100	1.1	5.0		mg/Kg	50	8/8/2012 9:37:03 AM	3009
Nickel	6.9	0.83	2.5		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Vanadium	22	0.28	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Zinc	69	5.0	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-024C

Client Sample ID: SWMU 14-16 (1.5-2.0')
Collection Date: 7/19/2012 4:51:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Barium	1000	3.0	5.0		mg/Kg	50	8/8/2012 12:12:41 PM	3009
Beryllium	0.73	0.046	0.75	J	mg/Kg	5	8/5/2012 5:14:15 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Chromium	15	0.59	1.5		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Cobalt	4.5	0.34	1.5		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Iron	15000	370	500		mg/Kg	500	8/8/2012 12:15:05 PM	3009
Lead	5.1	1.1	1.2		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Manganese	560	1.1	5.0		mg/Kg	50	8/8/2012 12:12:41 PM	3009
Nickel	7.1	0.83	2.5		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Vanadium	25	0.28	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Zinc	25	5.0	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-025C

Client Sample ID: SWMU 14-15 (0-0.5')
Collection Date: 7/19/2012 5:14:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Barium	670	3.0	5.0		mg/Kg	50	8/8/2012 9:42:14 AM	3009
Beryllium	0.67	0.046	0.75	J	mg/Kg	5	8/5/2012 5:18:23 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Chromium	14	0.59	1.5		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Cobalt	4.7	0.34	1.5		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Iron	12000	370	500		mg/Kg	500	8/8/2012 9:44:39 AM	3009
Lead	4.1	1.1	1.2		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Manganese	540	1.1	5.0		mg/Kg	50	8/8/2012 9:42:14 AM	3009
Nickel	8.2	0.83	2.5		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Vanadium	23	0.28	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Zinc	140	5.0	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-026C

Client Sample ID: SWMU 14-15 (1.5-2.0')
Collection Date: 7/19/2012 5:19:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Barium	650	3.0	5.0		mg/Kg	50	8/8/2012 9:47:22 AM	3009
Beryllium	0.51	0.046	0.75	J	mg/Kg	5	8/5/2012 5:20:48 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Chromium	8.9	0.59	1.5		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Cobalt	3.6	0.34	1.5		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Iron	7300	370	500		mg/Kg	500	8/8/2012 9:49:47 AM	3009
Lead	1.3	1.1	1.2		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Manganese	360	1.1	5.0		mg/Kg	50	8/8/2012 9:47:22 AM	3009
Nickel	5.6	0.83	2.5		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Vanadium	20	0.28	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Zinc	68	5.0	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-027C

Client Sample ID: SWMU 14-20 (0-0.5')
Collection Date: 7/19/2012 5:50:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Barium	940	3.0	5.0		mg/Kg	50	8/8/2012 10:03:14 AM	3009
Beryllium	0.69	0.046	0.75	J	mg/Kg	5	8/5/2012 5:31:38 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Chromium	9.4	0.59	1.5		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Cobalt	5.2	0.69	3.0		mg/Kg	10	8/8/2012 11:34:09 AM	3009
Iron	13000	370	500		mg/Kg	500	8/8/2012 10:05:39 AM	3009
Lead	2.7	1.1	1.2		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Manganese	650	1.1	5.0		mg/Kg	50	8/8/2012 10:03:14 AM	3009
Nickel	6.9	0.83	2.5		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Vanadium	21	0.28	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Zinc	17	5.0	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-028C

Client Sample ID: SWMU 14-20 (0-0.5') DUP
Collection Date: 7/19/2012 5:50:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Barium	890	3.0	5.0		mg/Kg	50	8/8/2012 10:08:22 AM	3009
Beryllium	0.76	0.046	0.75		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Chromium	8.7	0.59	1.5		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Cobalt	7.0	0.34	1.5		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Iron	14000	370	500		mg/Kg	500	8/8/2012 10:10:49 AM	3009
Lead	3.0	1.1	1.2		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Manganese	910	1.1	5.0		mg/Kg	50	8/8/2012 10:08:22 AM	3009
Nickel	8.0	0.83	2.5		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Vanadium	24	0.28	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Zinc	22	5.0	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1210582**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-001C

Client Sample ID: SWMU 14-6 (0-0.5')
Collection Date: 10/9/2012 1:35:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Barium	350	0.61	1.0		mg/Kg	10	10/17/2012 2:56:55 PM	4298
Beryllium	1.0	0.046	0.75		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Chromium	9.7	0.59	1.5		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Cobalt	5.0	0.34	1.5		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Iron	15000	370	500		mg/Kg	500	10/17/2012 2:59:21 PM	4298
Lead	6.4	1.1	1.2		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Manganese	420	0.21	1.0		mg/Kg	10	10/17/2012 2:56:55 PM	4298
Nickel	8.2	0.83	2.5		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:39:07 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Vanadium	17	0.28	12		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Zinc	17	5.0	12		mg/Kg	5	10/16/2012 5:38:30 PM	4298

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1210582**
Date Reported: **11/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-002C

Client Sample ID: SWMU 14-6 (1.5-2')
Collection Date: 10/9/2012 1:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Barium	330	0.61	1.0		mg/Kg	10	10/17/2012 3:01:57 PM	4298
Beryllium	0.78	0.046	0.75		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Chromium	23	0.59	1.5		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Cobalt	4.5	0.34	1.5		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Iron	13000	370	500		mg/Kg	500	10/17/2012 3:14:30 PM	4298
Lead	5.6	1.1	1.2		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Manganese	370	0.21	1.0		mg/Kg	10	10/17/2012 3:01:57 PM	4298
Nickel	7.1	0.83	2.5		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:44:25 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Vanadium	23	0.28	12		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Zinc	26	5.0	12		mg/Kg	5	10/16/2012 5:43:36 PM	4298

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-003C

Client Sample ID: SWMU 14-6 (10-12')
Collection Date: 10/9/2012 1:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Barium	340	0.61	1.0		mg/Kg	10	10/17/2012 3:17:21 PM	4298
Beryllium	0.83	0.046	0.75		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Chromium	9.1	0.59	1.5		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Cobalt	4.7	0.34	1.5		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Iron	13000	370	500		mg/Kg	500	10/17/2012 3:19:44 PM	4298
Lead	4.5	1.1	1.2		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Manganese	340	0.21	1.0		mg/Kg	10	10/17/2012 3:17:21 PM	4298
Nickel	7.6	0.83	2.5		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:46:48 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Vanadium	21	0.28	12		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Zinc	16	5.0	12		mg/Kg	5	10/16/2012 5:50:19 PM	4298

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-004C

Client Sample ID: SWMU 14-6 (17-18')
Collection Date: 10/9/2012 2:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Barium	290	0.61	1.0		mg/Kg	10	10/17/2012 3:22:21 PM	4298
Beryllium	0.87	0.046	0.75		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Chromium	8.9	0.59	1.5		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Cobalt	5.6	0.34	1.5		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Iron	16000	370	500		mg/Kg	500	10/17/2012 3:27:16 PM	4298
Lead	2.9	1.1	1.2		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Manganese	1100	1.1	5.0		mg/Kg	50	10/17/2012 3:24:47 PM	4298
Nickel	11	0.83	2.5		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:49:15 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Vanadium	9.0	0.28	12	J	mg/Kg	5	10/16/2012 5:55:27 PM	4298
Zinc	17	5.0	12		mg/Kg	5	10/16/2012 5:55:27 PM	4298

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-005C

Client Sample ID: SWMU 14-21 (0-0.5')
Collection Date: 10/9/2012 3:35:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Barium	470	0.61	1.0		mg/Kg	10	10/17/2012 3:29:50 PM	4298
Beryllium	0.49	0.046	0.75	J	mg/Kg	5	10/16/2012 6:00:28 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Chromium	5.7	0.59	1.5		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Cobalt	3.2	0.34	1.5		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Iron	11000	370	500		mg/Kg	500	10/17/2012 3:34:44 PM	4298
Lead	10	1.1	1.2		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Manganese	550	1.1	5.0		mg/Kg	50	10/17/2012 3:32:16 PM	4298
Nickel	4.3	0.83	2.5		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:51:43 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Vanadium	17	0.28	12		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Zinc	29	5.0	12		mg/Kg	5	10/16/2012 6:00:28 PM	4298

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-006C

Client Sample ID: SWMU 14-21 (1.5-2')
Collection Date: 10/9/2012 3:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	3.1	12		mg/Kg	5	10/23/2012 7:54:10 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Barium	750	3.0	5.0		mg/Kg	50	10/17/2012 3:52:04 PM	4298
Beryllium	0.74	0.046	0.75	J	mg/Kg	5	10/16/2012 6:14:02 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Chromium	7.4	0.59	1.5		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Cobalt	3.9	0.34	1.5		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Iron	12000	370	500		mg/Kg	500	10/17/2012 3:54:29 PM	4298
Lead	5.0	1.1	1.2		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Manganese	550	1.1	5.0		mg/Kg	50	10/17/2012 3:52:04 PM	4298
Nickel	6.1	0.83	2.5		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:54:10 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Vanadium	16	0.28	12		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Zinc	22	5.0	12		mg/Kg	5	10/16/2012 6:14:02 PM	4298

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-007C

Client Sample ID: SWMU 14-21 (8-10')
Collection Date: 10/9/2012 4:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/23/2012 7:56:35 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Barium	160	0.30	0.50		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Beryllium	0.91	0.046	0.75		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Chromium	8.0	0.59	1.5		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Cobalt	4.3	0.34	1.5		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Iron	12000	370	500		mg/Kg	500	10/17/2012 3:57:07 PM	4298
Lead	4.7	1.1	1.2		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Manganese	220	0.11	0.50		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Nickel	7.3	0.83	2.5		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:56:35 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Vanadium	14	0.28	12		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Zinc	13	5.0	12		mg/Kg	5	10/16/2012 6:18:57 PM	4298

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1210583**
Date Reported: **11/12/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU No.14
Lab ID: 1210583-001C

Client Sample ID: SWMU 14-22 (0-0.5')
Collection Date: 10/9/2012 4:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/23/2012 7:59:00 PM	4300
Arsenic	ND	3.1	12		mg/Kg	5	10/23/2012 7:59:00 PM	4300
Barium	630	1.2	2.0		mg/Kg	20	10/23/2012 8:18:50 PM	4300
Beryllium	0.90	0.046	0.75		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Cadmium	ND	0.14	0.50		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Chromium	12	0.59	1.5		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Cobalt	5.5	0.34	1.5		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Iron	15000	370	500		mg/Kg	500	10/17/2012 2:19:56 PM	4300
Lead	5.9	1.1	1.2		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Manganese	550	0.42	2.0		mg/Kg	20	10/23/2012 8:18:50 PM	4300
Nickel	8.3	0.83	2.5		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:59:00 PM	4300
Silver	ND	0.18	1.2		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Vanadium	25	0.28	12		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Zinc	33	5.0	12		mg/Kg	5	10/17/2012 2:07:35 PM	4300

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **1210583**
Date Reported: **11/12/2012**

CLIENT: Western Refining Company
Project: SWMU No.14
Lab ID: 1210583-002C

Client Sample ID: SWMU 14-22 (1.5-2')
Collection Date: 10/9/2012 4:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 8:21:15 PM	4300
Arsenic	1.6	1.3	5.0	J	mg/Kg	2	10/17/2012 12:11:16 PM	4300
Barium	430	0.61	1.0		mg/Kg	10	10/17/2012 2:22:31 PM	4300
Beryllium	0.83	0.019	0.30		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Chromium	10	0.24	0.60		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Cobalt	4.2	0.14	0.60		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Iron	14000	370	500		mg/Kg	500	10/17/2012 2:24:56 PM	4300
Lead	4.3	0.44	0.50		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Manganese	540	0.42	2.0		mg/Kg	20	10/23/2012 8:23:45 PM	4300
Nickel	7.2	0.33	1.0		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 8:21:15 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Vanadium	17	0.11	5.0		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Zinc	20	2.0	5.0		mg/Kg	2	10/17/2012 12:11:16 PM	4300

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **1210583**
Date Reported: **11/12/2012**

CLIENT: Western Refining Company
Project: SWMU No.14
Lab ID: 1210583-003C

Client Sample ID: SWMU 14-22 (4-6')
Collection Date: 10/9/2012 5:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 8:26:10 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Barium	170	0.30	0.50		mg/Kg	5	10/17/2012 2:39:25 PM	4300
Beryllium	0.89	0.019	0.30		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Chromium	7.6	0.24	0.60		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Cobalt	4.3	0.14	0.60		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Iron	13000	370	500		mg/Kg	500	10/17/2012 2:44:12 PM	4300
Lead	4.0	0.44	0.50		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Manganese	370	0.21	1.0		mg/Kg	10	10/17/2012 2:41:49 PM	4300
Nickel	7.2	0.33	1.0		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 8:26:10 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Vanadium	13	0.11	5.0		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Zinc	13	2.0	5.0		mg/Kg	2	10/17/2012 12:16:23 PM	4300

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **1210583**
Date Reported: **11/12/2012**

CLIENT: Western Refining Company
Project: SWMU No.14
Lab ID: 1210583-004C

Client Sample ID: SWMU 14-22 (4-6') DUP
Collection Date: 10/9/2012 5:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 8:28:35 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Barium	170	0.30	0.50		mg/Kg	5	10/17/2012 2:46:48 PM	4300
Beryllium	0.84	0.019	0.30		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Chromium	6.8	0.24	0.60		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Cobalt	3.9	0.14	0.60		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Iron	12000	370	500		mg/Kg	500	10/17/2012 2:49:14 PM	4300
Lead	4.2	0.44	0.50		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Manganese	230	0.11	0.50		mg/Kg	5	10/17/2012 2:46:48 PM	4300
Nickel	6.5	0.33	1.0		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 8:28:35 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Vanadium	12	0.11	5.0		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Zinc	12	2.0	5.0		mg/Kg	2	10/17/2012 12:21:23 PM	4300

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU No.14
Lab ID: 1210583-005C

Client Sample ID: SWMU 14-22 (8-10')
Collection Date: 10/9/2012 5:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 8:30:59 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Barium	250	0.61	1.0		mg/Kg	10	10/17/2012 2:51:50 PM	4300
Beryllium	0.80	0.019	0.30		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Chromium	9.3	0.24	0.60		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Cobalt	3.8	0.14	0.60		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Iron	13000	370	500		mg/Kg	500	10/17/2012 2:54:18 PM	4300
Lead	3.9	0.44	0.50		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Manganese	270	0.21	1.0		mg/Kg	10	10/17/2012 2:51:50 PM	4300
Nickel	7.4	0.33	1.0		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 8:30:59 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Vanadium	13	0.11	5.0		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Zinc	14	2.0	5.0		mg/Kg	2	10/17/2012 12:28:03 PM	4300

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210656**
Date Reported: **11/13/2012**

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210656-001 **Matrix:** SOIL

Client Sample ID: SWMU 14-23 (0-0.5')
Collection Date: 10/10/2012 1:45:00 PM
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Arsenic	2.2	5.0	J	mg/Kg	2	10/25/2012 3:06:37 PM
Barium	600	5.0		mg/Kg	50	10/25/2012 3:37:00 PM
Beryllium	0.61	0.30		mg/Kg	2	10/25/2012 3:06:37 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 3:06:37 PM
Chromium	9.6	0.60		mg/Kg	2	10/25/2012 3:06:37 PM
Cobalt	3.4	0.60		mg/Kg	2	10/25/2012 3:06:37 PM
Iron	13000	500		mg/Kg	500	10/25/2012 3:39:26 PM
Lead	4.2	0.50		mg/Kg	2	10/25/2012 3:06:37 PM
Manganese	720	5.0		mg/Kg	50	10/25/2012 3:37:00 PM
Nickel	5.9	1.0		mg/Kg	2	10/25/2012 3:06:37 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:41:44 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Zinc	140	12		mg/Kg	5	10/25/2012 3:21:25 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210656-002 **Matrix:** SOIL

Client Sample ID: SWMU 14-23 (1.5-2')
Collection Date: 10/10/2012 1:55:00 PM
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Arsenic	3.0	5.0	J	mg/Kg	2	10/25/2012 8:22:15 PM
Barium	460	2.0		mg/Kg	20	10/25/2012 8:25:06 PM
Beryllium	0.62	0.30		mg/Kg	2	10/25/2012 8:22:15 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:22:15 PM
Chromium	15	0.60		mg/Kg	2	10/25/2012 8:22:15 PM
Cobalt	3.7	0.60		mg/Kg	2	10/25/2012 8:22:15 PM
Iron	12000	500		mg/Kg	500	10/25/2012 8:27:45 PM
Lead	7.6	0.50		mg/Kg	2	10/25/2012 8:22:15 PM
Manganese	570	2.0		mg/Kg	20	10/25/2012 8:25:06 PM
Nickel	6.5	1.0		mg/Kg	2	10/25/2012 8:22:15 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:53:24 PM
Vanadium	16	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Zinc	41	5.0		mg/Kg	2	10/25/2012 8:22:15 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210656**
Date Reported: **11/13/2012**

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210656-003 **Matrix:** SOIL

Client Sample ID: SWMU 14-23 (12-14')
Collection Date: 10/10/2012 2:05:00 PM
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Arsenic	1.6	5.0	J	mg/Kg	2	10/25/2012 8:45:39 PM
Barium	220	2.0		mg/Kg	20	10/25/2012 8:48:33 PM
Beryllium	0.87	0.30		mg/Kg	2	10/25/2012 8:45:39 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:45:39 PM
Chromium	8.3	0.60		mg/Kg	2	10/25/2012 8:45:39 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 8:45:39 PM
Iron	13000	500		mg/Kg	500	10/25/2012 8:51:11 PM
Lead	3.7	0.50		mg/Kg	2	10/25/2012 8:45:39 PM
Manganese	300	2.0		mg/Kg	20	10/25/2012 8:48:33 PM
Nickel	7.2	1.0		mg/Kg	2	10/25/2012 8:45:39 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 3:08:43 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Zinc	13	5.0		mg/Kg	2	10/25/2012 8:45:39 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210656**
Date Reported: **11/13/2012**

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210656-004 **Matrix:** SOIL

Client Sample ID: SWMU 14-23 (14-16')
Collection Date: 10/10/2012 2:15:00 PM
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Arsenic	1.3	5.0	J	mg/Kg	2	10/25/2012 8:56:59 PM
Barium	130	2.0		mg/Kg	20	10/25/2012 8:59:50 PM
Beryllium	0.75	0.30		mg/Kg	2	10/25/2012 8:56:59 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:56:59 PM
Chromium	7.8	0.60		mg/Kg	2	10/25/2012 8:56:59 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 8:56:59 PM
Iron	12000	500		mg/Kg	500	10/25/2012 9:02:34 PM
Lead	3.5	0.50		mg/Kg	2	10/25/2012 8:56:59 PM
Manganese	570	2.0		mg/Kg	20	10/25/2012 8:59:50 PM
Nickel	6.8	1.0		mg/Kg	2	10/25/2012 8:56:59 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 3:11:38 PM
Vanadium	15	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Zinc	12	5.0		mg/Kg	2	10/25/2012 8:56:59 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1210860**
Date Reported: **11/16/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210860-001C

Client Sample ID: SWMU 14-24 (0-0.5')
Collection Date: 10/17/2012 10:15:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Arsenic	2.1	1.3	5.0	J	mg/Kg	2	10/25/2012 12:21:41 PM	4440
Barium	440	0.61	1.0		mg/Kg	10	10/25/2012 2:09:26 PM	4440
Beryllium	0.80	0.019	0.30		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Chromium	10	0.24	0.60		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Cobalt	4.6	0.14	0.60		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Iron	15000	370	500		mg/Kg	500	11/2/2012 7:08:54 AM	4440
Lead	2.5	0.44	0.50		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Manganese	450	0.21	1.0		mg/Kg	10	10/25/2012 2:09:26 PM	4440
Nickel	8.0	0.33	1.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 1:23:58 PM	4440
Vanadium	22	0.11	5.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Zinc	25	2.0	5.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order: **1210860**
Date Reported: **11/16/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210860-002C

Client Sample ID: SWMU 14-24 (1.5-2')
Collection Date: 10/17/2012 10:30:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: **JLF**	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Arsenic	1.7	1.3	5.0	J	mg/Kg	2	10/25/2012 12:26:50 PM	4440
Barium	43	0.12	0.20		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Beryllium	0.83	0.019	0.30		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Chromium	7.8	0.24	0.60		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Cobalt	3.5	0.14	0.60		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Iron	16000	370	500		mg/Kg	500	11/2/2012 7:21:58 AM	4440
Lead	3.3	0.44	0.50		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Manganese	230	0.21	1.0		mg/Kg	10	10/25/2012 2:14:32 PM	4440
Nickel	6.4	0.33	1.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 1:26:49 PM	4440
Vanadium	14	0.11	5.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Zinc	12	2.0	5.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 03, 2012

Ed Riege
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: SWMU NO.14 OrderNo.: 1207748

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1207748**
Date Reported: **8/3/2012**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (0-0.5)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:15:00 PM
Lab ID: 1207748-001
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	33	9.9		mg/Kg	1	7/20/2012 9:15:31 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/20/2012 9:15:31 AM
Surr: DNOP	121	77.6-140		%REC	1	7/20/2012 9:15:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/20/2012 3:30:59 AM
Surr: BFB	102	69.7-121		%REC	1	7/20/2012 3:30:59 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.038	0.033		mg/Kg	1	7/20/2012 2:58:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	7/26/2012 8:30:20 PM
Arsenic	ND	12		mg/Kg	5	7/25/2012 5:36:01 PM
Barium	790	2.0		mg/Kg	20	7/25/2012 5:52:08 PM
Beryllium	ND	0.75		mg/Kg	5	7/26/2012 8:30:20 PM
Cadmium	ND	0.50		mg/Kg	5	7/25/2012 5:36:01 PM
Chromium	6.8	1.5		mg/Kg	5	7/25/2012 5:36:01 PM
Cobalt	5.4	1.5		mg/Kg	5	7/26/2012 8:30:20 PM
Iron	9000	500		mg/Kg	500	7/31/2012 6:15:57 PM
Lead	3.6	1.2		mg/Kg	5	7/25/2012 5:36:01 PM
Manganese	570	2.0		mg/Kg	20	7/30/2012 7:33:13 PM
Nickel	6.1	2.5		mg/Kg	5	7/26/2012 8:30:20 PM
Selenium	ND	12		mg/Kg	5	7/30/2012 7:30:35 PM
Silver	ND	1.2		mg/Kg	5	7/25/2012 5:36:01 PM
Vanadium	17	12		mg/Kg	5	7/26/2012 8:30:20 PM
Zinc	21	12		mg/Kg	5	7/26/2012 8:30:20 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Aniline	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Anthracene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Azobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (0-0.5)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:15:00 PM
Lab ID: 1207748-001
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Carbazole	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/26/2012 6:35:04 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Chrysene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/26/2012 6:35:04 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/26/2012 6:35:04 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/26/2012 6:35:04 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Fluorene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Isophorone	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Naphthalene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (0-0.5)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:15:00 PM
Lab ID: 1207748-001
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/26/2012 6:35:04 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/26/2012 6:35:04 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/26/2012 6:35:04 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Phenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Pyrene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Pyridine	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Surr: 2,4,6-Tribromophenol	68.1	20.1-121		%REC	1	7/26/2012 6:35:04 PM
Surr: 2-Fluorobiphenyl	60.0	19-133		%REC	1	7/26/2012 6:35:04 PM
Surr: 2-Fluorophenol	53.8	20.2-108		%REC	1	7/26/2012 6:35:04 PM
Surr: 4-Terphenyl-d14	57.8	18.9-115		%REC	1	7/26/2012 6:35:04 PM
Surr: Nitrobenzene-d5	59.7	20.8-123		%REC	1	7/26/2012 6:35:04 PM
Surr: Phenol-d5	53.0	19.8-115		%REC	1	7/26/2012 6:35:04 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Toluene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Ethylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Xylenes, Total	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Methyl tert-butyl ether (MTBE)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2,4-Trimethylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,3,5-Trimethylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dichloroethane (EDC)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dibromoethane (EDB)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Naphthalene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1-Methylnaphthalene	ND	3.34		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2-Methylnaphthalene	ND	3.34		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Acetone	ND	8.35		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Bromobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Bromodichloromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Bromoform	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2-Butanone	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Carbon tetrachloride	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Chlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Chloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Chloroform	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (0-0.5)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:15:00 PM
Lab ID: 1207748-001
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2-Chlorotoluene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Carbon disulfide	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
4-Chlorotoluene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
cis-1,2-DCE	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
cis-1,3-Dichloropropene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dibromo-3-chloropropane	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Dibromochloromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Dibromomethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,3-Dichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,4-Dichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Dichlorodifluoromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1-Dichloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1-Dichloroethene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dichloropropane	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,3-Dichloropropane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2,2-Dichloropropane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1-Dichloropropene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Hexachlorobutadiene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Isopropylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
4-Isopropyltoluene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Methylene chloride	ND	8.35		µg/Kg-dry	1	7/18/2012 3:33:05 PM
n-Butylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2-Hexanone	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
n-Propylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
sec-Butylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Styrene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
4-Methyl-2-pentanone	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
tert-Butylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1,1,2-Tetrachloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1,2,2-Tetrachloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Tetrachloroethene (PCE)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
trans-1,2-DCE	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
trans-1,3-Dichloropropene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2,3-Trichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2,4-Trichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1,1-Trichloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1,2-Trichloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Trichloroethene (TCE)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Trichlorofluoromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2,3-Trichloropropane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (0-0.5)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:15:00 PM
Lab ID: 1207748-001
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	7/18/2012 3:33:05 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	7/18/2012 3:33:05 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	7/18/2012 3:33:05 PM
Surr: Toluene-d8	102	70-130		%REC	1	7/18/2012 3:33:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207748-002 **Matrix:** SOIL

Client Sample ID: SWMU 14-1 (1.5-2)
Collection Date: 7/16/2012 4:20:00 PM
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	30	10		mg/Kg	1	7/20/2012 10:42:33 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/20/2012 10:42:33 AM
Surr: DNOP	121	77.6-140		%REC	1	7/20/2012 10:42:33 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/20/2012 3:59:43 AM
Surr: BFB	102	69.7-121		%REC	1	7/20/2012 3:59:43 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	7/20/2012 2:59:54 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	7/26/2012 8:33:08 PM
Arsenic	ND	12		mg/Kg	5	7/25/2012 5:42:55 PM
Barium	550	2.0		mg/Kg	20	7/25/2012 5:54:25 PM
Beryllium	0.89	0.75		mg/Kg	5	7/26/2012 8:33:08 PM
Cadmium	ND	0.50		mg/Kg	5	7/25/2012 5:42:55 PM
Chromium	11	1.5		mg/Kg	5	7/25/2012 5:42:55 PM
Cobalt	5.1	1.5		mg/Kg	5	7/26/2012 8:33:08 PM
Iron	17000	500		mg/Kg	500	7/31/2012 6:23:35 PM
Lead	4.6	1.2		mg/Kg	5	7/25/2012 5:42:55 PM
Manganese	510	2.0		mg/Kg	20	7/30/2012 7:40:43 PM
Nickel	8.3	2.5		mg/Kg	5	7/26/2012 8:33:08 PM
Selenium	ND	50		mg/Kg	20	7/30/2012 7:40:43 PM
Silver	ND	1.2		mg/Kg	5	7/25/2012 5:42:55 PM
Vanadium	26	12		mg/Kg	5	7/26/2012 8:33:08 PM
Zinc	21	12		mg/Kg	5	7/26/2012 8:33:08 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Aniline	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Anthracene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Azobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207748-002 **Matrix:** SOIL

Client Sample ID: SWMU 14-1 (1.5-2)
Collection Date: 7/16/2012 4:20:00 PM
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Carbazole	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/26/2012 7:04:57 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Chrysene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/26/2012 7:04:57 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/26/2012 7:04:57 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/26/2012 7:04:57 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Fluorene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Isophorone	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Naphthalene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (1.5-2)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:20:00 PM
Lab ID: 1207748-002
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/26/2012 7:04:57 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/26/2012 7:04:57 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/26/2012 7:04:57 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Phenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Pyrene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Pyridine	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Surr: 2,4,6-Tribromophenol	93.8	20.1-121		%REC	1	7/26/2012 7:04:57 PM
Surr: 2-Fluorobiphenyl	77.9	19-133		%REC	1	7/26/2012 7:04:57 PM
Surr: 2-Fluorophenol	75.9	20.2-108		%REC	1	7/26/2012 7:04:57 PM
Surr: 4-Terphenyl-d14	91.3	18.9-115		%REC	1	7/26/2012 7:04:57 PM
Surr: Nitrobenzene-d5	81.4	20.8-123		%REC	1	7/26/2012 7:04:57 PM
Surr: Phenol-d5	67.7	19.8-115		%REC	1	7/26/2012 7:04:57 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Toluene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Ethylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Xylenes, Total	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Methyl tert-butyl ether (MTBE)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2,4-Trimethylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,3,5-Trimethylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dichloroethane (EDC)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dibromoethane (EDB)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Naphthalene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1-Methylnaphthalene	ND	3.48		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2-Methylnaphthalene	ND	3.48		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Acetone	ND	8.71		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Bromobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Bromodichloromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Bromoform	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2-Butanone	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Carbon tetrachloride	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Chlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Chloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Chloroform	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207748-002 **Matrix:** SOIL

Client Sample ID: SWMU 14-1 (1.5-2)
Collection Date: 7/16/2012 4:20:00 PM
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2-Chlorotoluene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Carbon disulfide	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
4-Chlorotoluene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
cis-1,2-DCE	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
cis-1,3-Dichloropropene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dibromo-3-chloropropane	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Dibromochloromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Dibromomethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,3-Dichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,4-Dichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Dichlorodifluoromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1-Dichloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1-Dichloroethene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dichloropropane	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,3-Dichloropropane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2,2-Dichloropropane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1-Dichloropropene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Hexachlorobutadiene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Isopropylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
4-Isopropyltoluene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Methylene chloride	ND	8.71		µg/Kg-dry	1	7/18/2012 4:03:02 PM
n-Butylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2-Hexanone	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
n-Propylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
sec-Butylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Styrene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
4-Methyl-2-pentanone	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
tert-Butylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1,1,2-Tetrachloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1,2,2-Tetrachloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Tetrachloroethene (PCE)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
trans-1,2-DCE	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
trans-1,3-Dichloropropene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2,3-Trichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2,4-Trichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1,1-Trichloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1,2-Trichloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Trichloroethene (TCE)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Trichlorofluoromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2,3-Trichloropropane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (1.5-2)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:20:00 PM
Lab ID: 1207748-002
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%REC	1	7/18/2012 4:03:02 PM
Surr: 4-Bromofluorobenzene	92.4	70-130		%REC	1	7/18/2012 4:03:02 PM
Surr: Dibromofluoromethane	96.4	70-130		%REC	1	7/18/2012 4:03:02 PM
Surr: Toluene-d8	102	70-130		%REC	1	7/18/2012 4:03:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (10-12)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:30:00 PM
Lab ID: 1207748-003
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	220	10		mg/Kg	1	7/20/2012 8:26:08 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/20/2012 8:26:08 AM
Surr: DNOP	114	77.6-140		%REC	1	7/20/2012 8:26:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/21/2012 4:56:40 AM
Surr: BFB	124	69.7-121	S	%REC	1	7/21/2012 4:56:40 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	7/20/2012 3:01:39 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	7/26/2012 8:35:53 PM
Arsenic	ND	12		mg/Kg	5	7/25/2012 5:47:33 PM
Barium	1100	5.0		mg/Kg	50	7/25/2012 5:56:42 PM
Beryllium	ND	0.75		mg/Kg	5	7/26/2012 8:35:53 PM
Cadmium	ND	0.50		mg/Kg	5	7/25/2012 5:47:33 PM
Chromium	11	1.5		mg/Kg	5	7/25/2012 5:47:33 PM
Cobalt	5.0	1.5		mg/Kg	5	7/26/2012 8:35:53 PM
Iron	14000	500		mg/Kg	500	7/31/2012 6:26:11 PM
Lead	2.5	1.2		mg/Kg	5	7/25/2012 5:47:33 PM
Manganese	590	2.0		mg/Kg	20	7/30/2012 7:56:33 PM
Nickel	7.6	2.5		mg/Kg	5	7/26/2012 8:35:53 PM
Selenium	ND	12		mg/Kg	5	7/30/2012 7:53:56 PM
Silver	ND	1.2		mg/Kg	5	7/25/2012 5:47:33 PM
Vanadium	24	12		mg/Kg	5	7/26/2012 8:35:53 PM
Zinc	20	12		mg/Kg	5	7/26/2012 8:35:53 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Aniline	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Anthracene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Azobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (10-12)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:30:00 PM
Lab ID: 1207748-003
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Carbazole	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/26/2012 7:34:47 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Chrysene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/26/2012 7:34:47 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/26/2012 7:34:47 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/26/2012 7:34:47 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/26/2012 7:34:47 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/26/2012 7:34:47 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Fluorene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Isophorone	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
1-Methylnaphthalene	0.49	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Naphthalene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (10-12)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:30:00 PM
Lab ID: 1207748-003
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/26/2012 7:34:47 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/26/2012 7:34:47 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/26/2012 7:34:47 PM
Phenanthrene	0.57	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Phenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Pyrene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Pyridine	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Surr: 2,4,6-Tribromophenol	81.4	20.1-121		%REC	1	7/26/2012 7:34:47 PM
Surr: 2-Fluorobiphenyl	79.0	19-133		%REC	1	7/26/2012 7:34:47 PM
Surr: 2-Fluorophenol	66.6	20.2-108		%REC	1	7/26/2012 7:34:47 PM
Surr: 4-Terphenyl-d14	75.6	18.9-115		%REC	1	7/26/2012 7:34:47 PM
Surr: Nitrobenzene-d5	77.7	20.8-123		%REC	1	7/26/2012 7:34:47 PM
Surr: Phenol-d5	72.5	19.8-115		%REC	1	7/26/2012 7:34:47 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Toluene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Ethylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Xylenes, Total	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Methyl tert-butyl ether (MTBE)	13.1	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2,4-Trimethylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,3,5-Trimethylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dichloroethane (EDC)	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dibromoethane (EDB)	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Naphthalene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1-Methylnaphthalene	ND	3.52		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2-Methylnaphthalene	ND	3.52		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Acetone	ND	8.81		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Bromobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Bromodichloromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Bromoform	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2-Butanone	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Carbon tetrachloride	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Chlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Chloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Chloroform	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (10-12)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:30:00 PM
Lab ID: 1207748-003
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2-Chlorotoluene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Carbon disulfide	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
4-Chlorotoluene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
cis-1,2-DCE	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
cis-1,3-Dichloropropene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dibromo-3-chloropropane	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Dibromochloromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Dibromomethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,3-Dichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,4-Dichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Dichlorodifluoromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1-Dichloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1-Dichloroethene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dichloropropane	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,3-Dichloropropane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2,2-Dichloropropane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1-Dichloropropene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Hexachlorobutadiene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Isopropylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
4-Isopropyltoluene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Methylene chloride	ND	8.81		µg/Kg-dry	1	7/18/2012 4:33:06 PM
n-Butylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2-Hexanone	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
n-Propylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
sec-Butylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Styrene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
4-Methyl-2-pentanone	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
tert-Butylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1,1,2-Tetrachloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1,2,2-Tetrachloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Tetrachloroethene (PCE)	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
trans-1,2-DCE	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
trans-1,3-Dichloropropene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2,3-Trichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2,4-Trichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1,1-Trichloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1,2-Trichloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Trichloroethene (TCE)	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Trichlorofluoromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2,3-Trichloropropane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (10-12)
Project: SWMU NO.14
Collection Date: 7/16/2012 4:30:00 PM
Lab ID: 1207748-003
Matrix: SOIL
Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%REC	1	7/18/2012 4:33:06 PM
Surr: 4-Bromofluorobenzene	87.2	70-130		%REC	1	7/18/2012 4:33:06 PM
Surr: Dibromofluoromethane	99.4	70-130		%REC	1	7/18/2012 4:33:06 PM
Surr: Toluene-d8	101	70-130		%REC	1	7/18/2012 4:33:06 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120720030
Project Name: 1207748

Analytical Results Report

Sample Number 120720030-001 **Sampling Date** 7/16/2012 **Date/Time Received** 7/20/2012 1:15 PM
Client Sample ID 1207748-001D / SWMU 14-1 (0-0.5) **Sampling Time** 4:15 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.01	7/30/2012	CRW	EPA 335.4	

Sample Number 120720030-002 **Sampling Date** 7/16/2012 **Date/Time Received** 7/20/2012 1:15 PM
Client Sample ID 1207748-002D / SWMU 14-1 (1.5-2) **Sampling Time** 4:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.01	7/30/2012	CRW	EPA 335.4	

Sample Number 120720030-003 **Sampling Date** 7/16/2012 **Date/Time Received** 7/20/2012 1:15 PM
Client Sample ID 1207748-003D / SWMU 14-1 (10-12) **Sampling Time** 4:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.01	7/30/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2911** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **2911** RunNo: **4133**
Prep Date: **7/19/2012** Analysis Date: **7/19/2012** SeqNo: **118627** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		114	77.6	140			

Sample ID **LCS-2911** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **2911** RunNo: **4133**
Prep Date: **7/19/2012** Analysis Date: **7/19/2012** SeqNo: **118783** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.1	52.6	130			
Surr: DNOP	4.6		5.000		91.0	77.6	140			

Sample ID **1207748-001CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 14-1 (0-0.5)** Batch ID: **2911** RunNo: **4172**
Prep Date: **7/19/2012** Analysis Date: **7/20/2012** SeqNo: **120061** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	9.8	49.21	33.03	73.8	57.2	146			
Surr: DNOP	4.7		4.921		95.0	77.6	140			

Sample ID **1207748-001CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 14-1 (0-0.5)** Batch ID: **2911** RunNo: **4172**
Prep Date: **7/19/2012** Analysis Date: **7/20/2012** SeqNo: **120062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	75	10	50.15	33.03	83.6	57.2	146	7.81	24.5	
Surr: DNOP	4.7		5.015		94.2	77.6	140	0	0	

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2878** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **2878** RunNo: **4160**
Prep Date: **7/18/2012** Analysis Date: **7/19/2012** SeqNo: **119360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	69.7	121			

Sample ID **LCS-2878** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **2878** RunNo: **4160**
Prep Date: **7/18/2012** Analysis Date: **7/19/2012** SeqNo: **119361** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	85	115			
Surr: BFB	1100		1000		109	69.7	121			

Sample ID **1207548-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **2878** RunNo: **4160**
Prep Date: **7/18/2012** Analysis Date: **7/19/2012** SeqNo: **119368** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.39	0	98.5	85.4	147			
Surr: BFB	990		935.5		106	69.7	121			

Sample ID **1207548-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **2878** RunNo: **4160**
Prep Date: **7/18/2012** Analysis Date: **7/19/2012** SeqNo: **119369** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	23.85	0	95.0	85.4	147	1.61	19.2	
Surr: BFB	1000		954.2		109	69.7	121	0	0	

Sample ID **MB-2915** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **2915** RunNo: **4189**
Prep Date: **7/19/2012** Analysis Date: **7/21/2012** SeqNo: **121067** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		99.7	69.7	121			

Sample ID **LCS-2915** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **2915** RunNo: **4189**
Prep Date: **7/19/2012** Analysis Date: **7/21/2012** SeqNo: **121068** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	85	115			
Surr: BFB	1000		1000		104	69.7	121			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2881**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **2881**	RunNo: **4146**			
Prep Date: **7/18/2012**	Analysis Date: **7/18/2012**	SeqNo: **118507**	Units: **µg/Kg-dry**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.00								
Toluene	ND	1.00								
Ethylbenzene	ND	1.00								
Xylenes, Total	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	1.00								
1,2,4-Trimethylbenzene	ND	1.00								
1,3,5-Trimethylbenzene	ND	1.00								
1,2-Dichloroethane (EDC)	ND	1.00								
1,2-Dibromoethane (EDB)	ND	1.00								
Naphthalene	ND	1.00								
1-Methylnaphthalene	ND	4.00								
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	1.00								
Bromodichloromethane	ND	1.00								
Bromoform	ND	1.00								
2-Butanone	ND	2.00								
Carbon tetrachloride	ND	1.00								
Chlorobenzene	ND	1.00								
Chloroethane	ND	1.00								
Chloroform	ND	1.00								
Chloromethane	ND	1.00								
2-Chlorotoluene	ND	1.00								
Carbon disulfide	ND	2.00								
4-Chlorotoluene	ND	1.00								
cis-1,2-DCE	ND	1.00								
cis-1,3-Dichloropropene	ND	1.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	1.00								
Dibromomethane	ND	1.00								
1,2-Dichlorobenzene	ND	1.00								
1,3-Dichlorobenzene	ND	1.00								
1,4-Dichlorobenzene	ND	1.00								
Dichlorodifluoromethane	ND	1.00								
1,1-Dichloroethane	ND	1.00								
1,1-Dichloroethene	ND	1.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	1.00								
2,2-Dichloropropane	ND	1.00								
1,1-Dichloropropene	ND	1.00								
Hexachlorobutadiene	ND	1.00								

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2881** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **2881** RunNo: **4146**
Prep Date: **7/18/2012** Analysis Date: **7/18/2012** SeqNo: **118507** Units: **µg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.00								
4-Isopropyltoluene	ND	1.00								
Methylene chloride	ND	10.0								
n-Butylbenzene	ND	1.00								
2-Hexanone	ND	2.00								
n-Propylbenzene	ND	1.00								
sec-Butylbenzene	ND	1.00								
Styrene	ND	1.00								
4-Methyl-2-pentanone	ND	2.00								
tert-Butylbenzene	ND	1.00								
1,1,1,2-Tetrachloroethane	ND	1.00								
1,1,2,2-Tetrachloroethane	ND	1.00								
Tetrachloroethene (PCE)	ND	1.00								
trans-1,2-DCE	ND	1.00								
trans-1,3-Dichloropropene	ND	1.00								
1,2,3-Trichlorobenzene	ND	1.00								
1,2,4-Trichlorobenzene	ND	1.00								
1,1,1-Trichloroethane	ND	1.00								
1,1,2-Trichloroethane	ND	1.00								
Trichloroethene (TCE)	ND	1.00								
Trichlorofluoromethane	ND	1.00								
1,2,3-Trichloropropane	ND	1.00								
Vinyl chloride	ND	1.00								
Surr: 1,2-Dichloroethane-d4	55.0		50.00		110	70	130			
Surr: 4-Bromofluorobenzene	46.9		50.00		93.9	70	130			
Surr: Dibromofluoromethane	50.6		50.00		101	70	130			
Surr: Toluene-d8	47.4		50.00		94.7	70	130			

Sample ID **lcs-2881** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **2881** RunNo: **4146**
Prep Date: **7/18/2012** Analysis Date: **7/18/2012** SeqNo: **118508** Units: **µg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	10.2	1.00	10.00	0	102	60	140			
Toluene	10.8	1.00	10.00	0	108	60	140			
Chlorobenzene	11.1	1.00	10.00	0	111	60	140			
1,1-Dichloroethene	11.7	1.00	10.00	0	117	60	140			
Trichloroethene (TCE)	11.2	1.00	10.00	0	112	60	140			
Surr: 1,2-Dichloroethane-d4	54.9		50.00		110	70	130			
Surr: 4-Bromofluorobenzene	50.2		50.00		100	70	130			
Surr: Dibromofluoromethane	51.4		50.00		103	70	130			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**lcs-2881**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**2881**	RunNo:	**4146**
Prep Date:	**7/18/2012**	Analysis Date:	**7/18/2012**	SeqNo:	**118508**
Units:	**µg/Kg-dry**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	50.3		50.00		101	70	130			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2996**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **2996**	RunNo: **4454**			
Prep Date: **7/24/2012**	Analysis Date: **7/26/2012**	SeqNo: **124345**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2996** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124345** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		79.2	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.3	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		87.9	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.2	20.8	123			
Surr: Phenol-d5	2.7		3.330		82.4	19.8	115			

Sample ID **lcs-2996** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124346** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-2996** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124346** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	69.0	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	67.9	41.1	96.9			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	61.9	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	80.8	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.1	39.1	86.9			
4-Nitrophenol	2.8	0.25	3.330	0	82.9	44.2	107			
Pentachlorophenol	2.3	0.40	3.330	0	68.1	36.2	80			
Phenol	2.5	0.20	3.330	0	73.9	42.7	92.7			
Pyrene	1.0	0.20	1.670	0	62.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.4	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.8		3.330		82.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		75.6	19	133			
Surr: 2-Fluorophenol	2.2		3.330		66.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.8	20.8	123			
Surr: Phenol-d5	2.5		3.330		74.7	19.8	115			

Sample ID **1207666-001Ams** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124359** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.3	1.0	8.322	0	75.9	38.6	100			
4-Chloro-3-methylphenol	14	2.5	16.59	0	86.5	35.8	108			
2-Chlorophenol	13	1.0	16.59	0	79.4	48.2	96.1			
1,4-Dichlorobenzene	6.0	1.0	8.322	0	72.5	42.5	97.6			
2,4-Dinitrotoluene	7.0	2.5	8.322	0	84.0	51.2	108			
N-Nitrosodi-n-propylamine	7.0	1.0	8.322	0	84.7	31.6	114			
4-Nitrophenol	16	1.2	16.59	0.3837	94.3	22.7	144			
Pentachlorophenol	9.8	2.0	16.59	0	59.3	24	109			
Phenol	17	1.0	16.59	6.194	66.9	33.1	108			
Pyrene	5.2	1.0	8.322	0	62.5	42.7	98.9			
1,2,4-Trichlorobenzene	6.1	1.0	8.322	0	73.0	27.1	118			
Surr: 2,4,6-Tribromophenol	15		16.59		92.7	20.1	121			
Surr: 2-Fluorobiphenyl	6.6		8.322		79.8	19	133			
Surr: 2-Fluorophenol	13		16.59		75.7	20.2	108			
Surr: 4-Terphenyl-d14	6.3		8.322		75.6	18.9	115			
Surr: Nitrobenzene-d5	6.7		8.322		80.5	20.8	123			
Surr: Phenol-d5	15		16.59		88.8	19.8	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207666-001Amsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.2	1.0	8.406	0	73.4	38.6	100	2.26	20	
4-Chloro-3-methylphenol	14	2.5	16.76	0	81.8	35.8	108	4.66	20	
2-Chlorophenol	13	1.0	16.76	0	79.6	48.2	96.1	1.28	20	
1,4-Dichlorobenzene	6.2	1.0	8.406	0	73.6	42.5	97.6	2.48	20	
2,4-Dinitrotoluene	6.8	2.5	8.406	0	81.0	51.2	108	2.63	20	
N-Nitrosodi-n-propylamine	7.4	1.0	8.406	0	88.4	31.6	114	5.25	20	
4-Nitrophenol	15	1.3	16.76	0.3837	86.4	22.7	144	7.52	20	
Pentachlorophenol	10	2.0	16.76	0	61.0	24	109	3.78	20	
Phenol	20	1.0	16.76	6.194	81.0	33.1	108	13.4	20	
Pyrene	4.8	1.0	8.406	0	57.5	42.7	98.9	7.41	20	
1,2,4-Trichlorobenzene	6.3	1.0	8.406	0	74.7	27.1	118	3.30	20	
Surr: 2,4,6-Tribromophenol	15		16.76		88.4	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	6.3		8.406		75.1	19	133	0	0	
Surr: 2-Fluorophenol	14		16.76		81.8	20.2	108	0	0	
Surr: 4-Terphenyl-d14	6.1		8.406		72.3	18.9	115	0	0	
Surr: Nitrobenzene-d5	6.7		8.406		79.6	20.8	123	0	0	
Surr: Phenol-d5	15		16.76		88.2	19.8	115	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2919** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **2919** RunNo: **4199**
Prep Date: **7/19/2012** Analysis Date: **7/20/2012** SeqNo: **120246** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-2919** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **2919** RunNo: **4199**
Prep Date: **7/19/2012** Analysis Date: **7/20/2012** SeqNo: **120247** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Sample ID **1207796-008AMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **2919** RunNo: **4199**
Prep Date: **7/19/2012** Analysis Date: **7/20/2012** SeqNo: **120251** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1661	0	98.8	75	125			

Sample ID **1207796-008AMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **2919** RunNo: **4199**
Prep Date: **7/19/2012** Analysis Date: **7/20/2012** SeqNo: **120252** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1643	0	98.0	75	125	1.87	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2958** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **2958** RunNo: **4414**
Prep Date: **7/22/2012** Analysis Date: **7/25/2012** SeqNo: **123218** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID **LCS-2958** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **2958** RunNo: **4414**
Prep Date: **7/22/2012** Analysis Date: **7/25/2012** SeqNo: **123219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0.8270	98.4	80	120			
Barium	25	0.10	25.00	0	101	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	25	0.30	25.00	0	99.0	80	120			
Lead	25	0.25	25.00	0	101	80	120			
Selenium	23	2.5	25.00	0	93.8	80	120			
Silver	5.1	0.25	5.000	0	101	80	120			

Sample ID **1207556-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **2958** RunNo: **4414**
Prep Date: **7/22/2012** Analysis Date: **7/25/2012** SeqNo: **123222** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5	24.80	0	0	75	125			S
Barium	25	0.10	24.80	1.334	97.1	75	125			
Cadmium	25	0.10	24.80	0	100	75	125			
Chromium	34	0.30	24.80	9.377	100	75	125			
Lead	71	0.25	24.80	46.37	99.3	75	125			E
Selenium	ND	2.5	24.80	0	0	75	125			S
Silver	4.8	0.25	4.961	0	97.6	75	125			

Sample ID **1207556-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **2958** RunNo: **4414**
Prep Date: **7/22/2012** Analysis Date: **7/25/2012** SeqNo: **123225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5	24.83	0	0	75	125	0	20	S
Barium	25	0.10	24.83	1.334	95.3	75	125	1.65	20	
Cadmium	24	0.10	24.83	0	98.3	75	125	1.75	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207748**
03-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**1207556-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**BatchQC**	Batch ID:	**2958**	RunNo:	**4414**
Prep Date:	**7/22/2012**	Analysis Date:	**7/25/2012**	SeqNo:	**123225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	32	0.30	24.83	9.377	92.7	75	125	5.72	20	
Lead	70	0.25	24.83	46.37	93.7	75	125	1.95	20	E
Selenium	ND	2.5	24.83	0	0	75	125	0	20	S
Silver	4.8	0.25	4.966	0	95.9	75	125	1.69	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1207748**

Received by/date: 07/18/12

Logged By: **Ashley Gallegos** **7/18/2012 9:15:00 AM**

Completed By: **Ashley Gallegos** **7/18/2012 2:44:10 PM**

Reviewed By: JB 07/18/12

Chain of Custody

1. Were seals intact? Yes No Not Present ✔
2. Is Chain of Custody complete? Yes ✔ No Not Present
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ✔ No NA
5. Was an attempt made to cool the samples? Yes ✔ No NA
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ✔ No NA
7. Sample(s) in proper container(s)? Yes ✔ No
8. Sufficient sample volume for indicated test(s)? Yes ✔ No
9. Are samples (except VOA and ONG) properly preserved? Yes ✔ No
10. Was preservative added to bottles? Yes No ✔ NA
11. VOA vials have zero headspace? Yes No No VOA Vials ✔
12. Were any sample containers received broken? Yes No ✔
13. Does paperwork match bottle labels? Yes ✔ No
    (Note discrepancies on chain of custody)
    # of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody? Yes ✔ No (<2 or >12 unless noted)
15. Is it clear what analyses were requested? Yes ✔ No Adjusted?
16. Were all holding times able to be met? Yes ✔ No
    (If no, notify customer for authorization.) Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

    Person Notified: Date:
    By Whom: Via: eMail Phone Fax In Person
    Regarding:
    Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SOUTHWEST, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU NO.14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207748	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/16/12	1615	SOIL	SWMU 14-1 (0-0.5)	2 ENCORES	–	-001										X						
				2 VIALS	MEOH											X						
				2 JARS	–											X	X	X	X			
	1620	SOIL	SWMU 14-1 (1.5-2)	2 ENCORES	–	-002										X						
				2 VIALS	MEOH											X						
				2 JARS	–											X	X	X	X			
	1630	SOIL	SWMU 14-1 (10-12)	2 ENCORES	–	-003										X						
				2 VIALS	MEOH											X						
				2 JARS	–											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/17	0730	[signature]	[signature]	07/18/12	0915
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 22, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.14 OrderNo.: 1207900

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 10 sample(s) on 7/20/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 11:25:00 AM
Lab ID: 1207900-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	640	200		mg/Kg	20	7/21/2012 9:53:29 PM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	7/21/2012 9:53:29 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 9:53:29 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	20		mg/Kg	4	7/25/2012 4:17:15 PM
Surr: BFB	99.8	84-116		%REC	4	7/25/2012 4:17:15 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.15	0.033		mg/Kg	1	8/2/2012 10:41:11 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:36:25 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:36:25 PM
Barium	920	5.0		mg/Kg	50	8/8/2012 10:13:35 AM
Beryllium	0.77	0.75		mg/Kg	5	8/5/2012 5:36:25 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:36:25 PM
Chromium	11	1.5		mg/Kg	5	8/5/2012 5:36:25 PM
Cobalt	5.1	1.5		mg/Kg	5	8/5/2012 5:36:25 PM
Iron	13000	500		mg/Kg	500	8/8/2012 10:16:02 AM
Lead	2.7	1.2		mg/Kg	5	8/5/2012 5:36:25 PM
Manganese	600	5.0		mg/Kg	50	8/8/2012 10:13:35 AM
Nickel	8.0	2.5		mg/Kg	5	8/5/2012 5:36:25 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:36:25 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:36:25 PM
Vanadium	23	12		mg/Kg	5	8/5/2012 5:36:25 PM
Zinc	42	12		mg/Kg	5	8/5/2012 5:36:25 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Aniline	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Anthracene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Azobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 11:25:00 AM
Lab ID: 1207900-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Carbazole	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/25/2012 6:47:58 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Chrysene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/25/2012 6:47:58 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/25/2012 6:47:58 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/25/2012 6:47:58 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Fluorene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Isophorone	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Naphthalene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 11:25:00 AM
Lab ID: 1207900-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/25/2012 6:47:58 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/25/2012 6:47:58 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/25/2012 6:47:58 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Phenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Pyrene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Pyridine	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Surr: 2,4,6-Tribromophenol	115	20.1-121		%REC	1	7/25/2012 6:47:58 PM
Surr: 2-Fluorobiphenyl	108	19-133		%REC	1	7/25/2012 6:47:58 PM
Surr: 2-Fluorophenol	99.8	20.2-108		%REC	1	7/25/2012 6:47:58 PM
Surr: 4-Terphenyl-d14	112	18.9-115		%REC	1	7/25/2012 6:47:58 PM
Surr: Nitrobenzene-d5	114	20.8-123		%REC	1	7/25/2012 6:47:58 PM
Surr: Phenol-d5	98.8	19.8-115		%REC	1	7/25/2012 6:47:58 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Toluene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Ethylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Xylenes, Total	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Methyl tert-butyl ether (MTBE)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2,4-Trimethylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,3,5-Trimethylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dichloroethane (EDC)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dibromoethane (EDB)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Naphthalene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1-Methylnaphthalene	ND	3.99		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2-Methylnaphthalene	ND	3.99		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Acetone	ND	9.99		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Bromobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Bromodichloromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Bromoform	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2-Butanone	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Carbon tetrachloride	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Chlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Chloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Chloroform	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 11:25:00 AM
Lab ID: 1207900-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2-Chlorotoluene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Carbon disulfide	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
4-Chlorotoluene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
cis-1,2-DCE	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
cis-1,3-Dichloropropene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dibromo-3-chloropropane	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Dibromochloromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Dibromomethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,3-Dichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,4-Dichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Dichlorodifluoromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1-Dichloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1-Dichloroethene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dichloropropane	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,3-Dichloropropane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2,2-Dichloropropane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1-Dichloropropene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Hexachlorobutadiene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Isopropylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
4-Isopropyltoluene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Methylene chloride	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
n-Butylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2-Hexanone	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
n-Propylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
sec-Butylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Styrene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
4-Methyl-2-pentanone	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
tert-Butylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1,1,2-Tetrachloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1,2,2-Tetrachloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Tetrachloroethene (PCE)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
trans-1,2-DCE	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
trans-1,3-Dichloropropene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2,3-Trichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2,4-Trichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1,1-Trichloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1,2-Trichloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Trichloroethene (TCE)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Trichlorofluoromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2,3-Trichloropropane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 11:25:00 AM
Lab ID: 1207900-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	1	7/20/2012 11:53:02 AM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	1	7/20/2012 11:53:02 AM
Surr: Dibromofluoromethane	100	70-130		%REC	1	7/20/2012 11:53:02 AM
Surr: Toluene-d8	110	70-130		%REC	1	7/20/2012 11:53:02 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:00:00 PM
Lab ID: 1207900-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	280	10		mg/Kg	1	7/22/2012 5:54:53 PM
Motor Oil Range Organics (MRO)	310	50		mg/Kg	1	7/22/2012 5:54:53 PM
Surr: DNOP	118	77.6-140		%REC	1	7/22/2012 5:54:53 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/25/2012 4:45:55 PM
Surr: BFB	99.2	84-116		%REC	2	7/25/2012 4:45:55 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.23	0.033		mg/Kg	1	8/2/2012 10:42:58 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	2.5		mg/Kg	1	8/5/2012 6:56:24 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:38:48 PM
Barium	560	2.0		mg/Kg	20	8/8/2012 10:18:46 AM
Beryllium	0.65	0.15		mg/Kg	1	8/5/2012 6:56:24 PM
Cadmium	ND	0.10		mg/Kg	1	8/5/2012 6:56:24 PM
Chromium	19	0.30		mg/Kg	1	8/5/2012 6:56:24 PM
Cobalt	3.6	0.30		mg/Kg	1	8/5/2012 6:56:24 PM
Iron	11000	500		mg/Kg	500	8/8/2012 10:21:13 AM
Lead	1.7	0.25		mg/Kg	1	8/5/2012 6:56:24 PM
Manganese	400	2.0		mg/Kg	20	8/8/2012 10:18:46 AM
Nickel	6.0	0.50		mg/Kg	1	8/5/2012 6:56:24 PM
Selenium	ND	2.5		mg/Kg	1	8/5/2012 6:56:24 PM
Silver	ND	0.25		mg/Kg	1	8/5/2012 6:56:24 PM
Vanadium	18	2.5		mg/Kg	1	8/5/2012 6:56:24 PM
Zinc	42	12		mg/Kg	5	8/5/2012 5:38:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Aniline	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Anthracene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Azobenzene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:00:00 PM
Lab ID: 1207900-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Carbazole	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/25/2012 7:18:07 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Chrysene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/25/2012 7:18:07 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/25/2012 7:18:07 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/25/2012 7:18:07 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/25/2012 7:18:07 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/25/2012 7:18:07 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Fluorene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Isophorone	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Naphthalene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:00:00 PM
Lab ID: 1207900-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/25/2012 7:18:07 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/25/2012 7:18:07 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/25/2012 7:18:07 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Phenol	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Pyrene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Pyridine	ND	2.5		mg/Kg	1	7/25/2012 7:18:07 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/25/2012 7:18:07 PM
Surr: 2,4,6-Tribromophenol	119	20.1-121		%REC	1	7/25/2012 7:18:07 PM
Surr: 2-Fluorobiphenyl	104	19-133		%REC	1	7/25/2012 7:18:07 PM
Surr: 2-Fluorophenol	94.9	20.2-108		%REC	1	7/25/2012 7:18:07 PM
Surr: 4-Terphenyl-d14	106	18.9-115		%REC	1	7/25/2012 7:18:07 PM
Surr: Nitrobenzene-d5	106	20.8-123		%REC	1	7/25/2012 7:18:07 PM
Surr: Phenol-d5	97.3	19.8-115		%REC	1	7/25/2012 7:18:07 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Toluene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Naphthalene	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/21/2012 7:35:24 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/21/2012 7:35:24 AM
Acetone	ND	0.75		mg/Kg	1	7/21/2012 7:35:24 AM
Bromobenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Bromoform	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Bromomethane	ND	0.15		mg/Kg	1	7/21/2012 7:35:24 AM
2-Butanone	ND	0.50		mg/Kg	1	7/21/2012 7:35:24 AM
Carbon disulfide	ND	0.50		mg/Kg	1	7/21/2012 7:35:24 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
Chlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Chloroethane	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:00:00 PM
Lab ID: 1207900-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Chloromethane	ND	0.15		mg/Kg	1	7/21/2012 7:35:24 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Dibromomethane	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
2-Hexanone	ND	0.50		mg/Kg	1	7/21/2012 7:35:24 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/21/2012 7:35:24 AM
Methylene chloride	ND	0.15		mg/Kg	1	7/21/2012 7:35:24 AM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Styrene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:00:00 PM
Lab ID: 1207900-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.050		mg/Kg	1	7/21/2012 7:35:24 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/21/2012 7:35:24 AM
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	7/21/2012 7:35:24 AM
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	1	7/21/2012 7:35:24 AM
Surr: Dibromofluoromethane	93.6	70-130		%REC	1	7/21/2012 7:35:24 AM
Surr: Toluene-d8	101	70-130		%REC	1	7/21/2012 7:35:24 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207900-003 **Matrix:** SOIL

Client Sample ID: SWMU 14-3 (8-10')
Collection Date: 7/18/2012 12:15:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	2000	200		mg/Kg	20	7/21/2012 10:37:45 PM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	7/21/2012 10:37:45 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 10:37:45 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/25/2012 5:14:38 PM
Surr: BFB	126	84-116	S	%REC	20	7/25/2012 5:14:38 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.65	0.16		mg/Kg	5	8/2/2012 10:55:17 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:41:11 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:41:11 PM
Barium	380	2.0		mg/Kg	20	8/8/2012 10:23:59 AM
Beryllium	0.80	0.75		mg/Kg	5	8/5/2012 5:41:11 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:41:11 PM
Chromium	100	1.5		mg/Kg	5	8/5/2012 5:41:11 PM
Cobalt	5.6	1.5		mg/Kg	5	8/5/2012 5:41:11 PM
Iron	14000	500		mg/Kg	500	8/8/2012 10:26:26 AM
Lead	11	1.2		mg/Kg	5	8/5/2012 5:41:11 PM
Manganese	350	2.0		mg/Kg	20	8/8/2012 10:23:59 AM
Nickel	9.3	2.5		mg/Kg	5	8/5/2012 5:41:11 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:41:11 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:41:11 PM
Vanadium	29	12		mg/Kg	5	8/5/2012 5:41:11 PM
Zinc	67	12		mg/Kg	5	8/5/2012 5:41:11 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	2.0	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Acenaphthylene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Aniline	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Anthracene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Azobenzene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Benzoic acid	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (8-10')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:15:00 PM
Lab ID: 1207900-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Carbazole	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/25/2012 7:48:11 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Chrysene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	7/25/2012 7:48:11 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Dibenzofuran	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/25/2012 7:48:11 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/25/2012 7:48:11 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/25/2012 7:48:11 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/25/2012 7:48:11 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
Fluoranthene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Fluorene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Hexachloroethane	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Isophorone	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
1-Methylnaphthalene	24	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
2-Methylnaphthalene	29	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
2-Methylphenol	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Naphthalene	3.8	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (8-10')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:15:00 PM
Lab ID: 1207900-003 **Matrix:** SOIL **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	7/25/2012 7:48:11 PM
Nitrobenzene	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	7/25/2012 7:48:11 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	7/25/2012 7:48:11 PM
Phenanthrene	4.8	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Phenol	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Pyrene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Pyridine	ND	5.0		mg/Kg	1	7/25/2012 7:48:11 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/25/2012 7:48:11 PM
Surr: 2,4,6-Tribromophenol	98.8	20.1-121		%REC	1	7/25/2012 7:48:11 PM
Surr: 2-Fluorobiphenyl	111	19-133		%REC	1	7/25/2012 7:48:11 PM
Surr: 2-Fluorophenol	106	20.2-108		%REC	1	7/25/2012 7:48:11 PM
Surr: 4-Terphenyl-d14	121	18.9-115	S	%REC	1	7/25/2012 7:48:11 PM
Surr: Nitrobenzene-d5	115	20.8-123		%REC	1	7/25/2012 7:48:11 PM
Surr: Phenol-d5	99.0	19.8-115		%REC	1	7/25/2012 7:48:11 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Ethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2,4-Trimethylbenzene	6.2	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Naphthalene	3.3	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
1-Methylnaphthalene	18	4.0		mg/Kg	20	7/23/2012 2:09:24 PM
2-Methylnaphthalene	23	4.0		mg/Kg	20	7/23/2012 2:09:24 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 2:09:24 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 2:09:24 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 2:09:24 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 2:09:24 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (8-10')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:15:00 PM
Lab ID: 1207900-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 2:09:24 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 2:09:24 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 2:09:24 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 2:09:24 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (8-10')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:15:00 PM
Lab ID: 1207900-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 2:09:24 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 2:09:24 PM
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%REC	20	7/23/2012 2:09:24 PM
Surr: 4-Bromofluorobenzene	85.4	70-130		%REC	20	7/23/2012 2:09:24 PM
Surr: Dibromofluoromethane	105	70-130		%REC	20	7/23/2012 2:09:24 PM
Surr: Toluene-d8	105	70-130		%REC	20	7/23/2012 2:09:24 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (12-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:30:00 PM
Lab ID: 1207900-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	920	190		mg/Kg	20	7/21/2012 10:59:45 PM
Motor Oil Range Organics (MRO)	ND	960		mg/Kg	20	7/21/2012 10:59:45 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 10:59:45 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/25/2012 5:43:27 PM
Surr: BFB	129	84-116	S	%REC	20	7/25/2012 5:43:27 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.28	0.033		mg/Kg	1	8/2/2012 10:48:13 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:43:34 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:43:34 PM
Barium	350	2.0		mg/Kg	20	8/8/2012 10:39:57 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:43:34 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:43:34 PM
Chromium	110	1.5		mg/Kg	5	8/5/2012 5:43:34 PM
Cobalt	4.9	1.5		mg/Kg	5	8/5/2012 5:43:34 PM
Iron	14000	500		mg/Kg	500	8/8/2012 10:42:25 AM
Lead	12	1.2		mg/Kg	5	8/5/2012 5:43:34 PM
Manganese	570	2.0		mg/Kg	20	8/8/2012 10:39:57 AM
Nickel	8.5	2.5		mg/Kg	5	8/5/2012 5:43:34 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:43:34 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:43:34 PM
Vanadium	31	12		mg/Kg	5	8/5/2012 5:43:34 PM
Zinc	65	12		mg/Kg	5	8/5/2012 5:43:34 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Aniline	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Anthracene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Azobenzene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (12-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:30:00 PM
Lab ID: 1207900-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Carbazole	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/25/2012 8:18:17 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Chrysene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/25/2012 8:18:17 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/25/2012 8:18:17 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/25/2012 8:18:17 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/25/2012 8:18:17 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/25/2012 8:18:17 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Fluorene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Isophorone	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
1-Methylnaphthalene	9.2	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
2-Methylnaphthalene	6.0	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Naphthalene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (12-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:30:00 PM
Lab ID: 1207900-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/25/2012 8:18:17 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/25/2012 8:18:17 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/25/2012 8:18:17 PM
Phenanthrene	2.2	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Phenol	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Pyrene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Pyridine	ND	2.5		mg/Kg	1	7/25/2012 8:18:17 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/25/2012 8:18:17 PM
Surr: 2,4,6-Tribromophenol	66.2	20.1-121		%REC	1	7/25/2012 8:18:17 PM
Surr: 2-Fluorobiphenyl	73.3	19-133		%REC	1	7/25/2012 8:18:17 PM
Surr: 2-Fluorophenol	73.3	20.2-108		%REC	1	7/25/2012 8:18:17 PM
Surr: 4-Terphenyl-d14	79.0	18.9-115		%REC	1	7/25/2012 8:18:17 PM
Surr: Nitrobenzene-d5	75.4	20.8-123		%REC	1	7/25/2012 8:18:17 PM
Surr: Phenol-d5	71.4	19.8-115		%REC	1	7/25/2012 8:18:17 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Ethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2,4-Trimethylbenzene	4.3	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Naphthalene	2.2	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
1-Methylnaphthalene	16	4.0		mg/Kg	20	7/23/2012 3:06:28 PM
2-Methylnaphthalene	16	4.0		mg/Kg	20	7/23/2012 3:06:28 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 3:06:28 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 3:06:28 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 3:06:28 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 3:06:28 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (12-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:30:00 PM
Lab ID: 1207900-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 3:06:28 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 3:06:28 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 3:06:28 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 3:06:28 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (12-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:30:00 PM
Lab ID: 1207900-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 3:06:28 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 3:06:28 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	20	7/23/2012 3:06:28 PM
Surr: 4-Bromofluorobenzene	81.4	70-130		%REC	20	7/23/2012 3:06:28 PM
Surr: Dibromofluoromethane	109	70-130		%REC	20	7/23/2012 3:06:28 PM
Surr: Toluene-d8	105	70-130		%REC	20	7/23/2012 3:06:28 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (25.5-26')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:45:00 PM
Lab ID: 1207900-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/21/2012 4:43:23 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2012 4:43:23 PM
Surr: DNOP	116	77.6-140		%REC	1	7/21/2012 4:43:23 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/25/2012 6:41:04 PM
Surr: BFB	99.9	84-116		%REC	1	7/25/2012 6:41:04 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:49:59 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:45:59 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:45:59 PM
Barium	630	5.0		mg/Kg	50	8/8/2012 10:45:10 AM
Beryllium	1.1	0.75		mg/Kg	5	8/5/2012 5:45:59 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:45:59 PM
Chromium	17	1.5		mg/Kg	5	8/5/2012 5:45:59 PM
Cobalt	10	1.5		mg/Kg	5	8/5/2012 5:45:59 PM
Iron	21000	500		mg/Kg	500	8/8/2012 10:47:34 AM
Lead	ND	1.2		mg/Kg	5	8/5/2012 5:45:59 PM
Manganese	1400	5.0		mg/Kg	50	8/8/2012 10:45:10 AM
Nickel	17	2.5		mg/Kg	5	8/5/2012 5:45:59 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:45:59 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:45:59 PM
Vanadium	24	12		mg/Kg	5	8/5/2012 5:45:59 PM
Zinc	34	12		mg/Kg	5	8/5/2012 5:45:59 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Aniline	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Anthracene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Azobenzene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (25.5-26')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:45:00 PM
Lab ID: 1207900-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Carbazole	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/25/2012 8:48:18 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Chrysene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/25/2012 8:48:18 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/25/2012 8:48:18 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 8:48:18 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/25/2012 8:48:18 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/25/2012 8:48:18 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Fluorene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Isophorone	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Naphthalene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (25.5-26')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:45:00 PM
Lab ID: 1207900-005 **Matrix:** SOIL **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 8:48:18 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/25/2012 8:48:18 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/25/2012 8:48:18 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Phenol	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Pyrene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Pyridine	ND	0.50		mg/Kg	1	7/25/2012 8:48:18 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/25/2012 8:48:18 PM
Surr: 2,4,6-Tribromophenol	91.6	20.1-121		%REC	1	7/25/2012 8:48:18 PM
Surr: 2-Fluorobiphenyl	87.5	19-133		%REC	1	7/25/2012 8:48:18 PM
Surr: 2-Fluorophenol	86.6	20.2-108		%REC	1	7/25/2012 8:48:18 PM
Surr: 4-Terphenyl-d14	94.9	18.9-115		%REC	1	7/25/2012 8:48:18 PM
Surr: Nitrobenzene-d5	87.8	20.8-123		%REC	1	7/25/2012 8:48:18 PM
Surr: Phenol-d5	85.6	19.8-115		%REC	1	7/25/2012 8:48:18 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Toluene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Ethylbenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Xylenes, Total	ND	1.97		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Methyl tert-butyl ether (MTBE)	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2,4-Trimethylbenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,3,5-Trimethylbenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2-Dichloroethane (EDC)	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2-Dibromoethane (EDB)	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Naphthalene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1-Methylnaphthalene	ND	3.94		µg/Kg-dry	1	7/20/2012 12:23:18 PM
2-Methylnaphthalene	ND	3.94		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Acetone	ND	9.85		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Bromobenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Bromodichloromethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Bromoform	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
2-Butanone	ND	1.97		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Carbon tetrachloride	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Chlorobenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Chloroethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Chloroform	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207900-005 **Matrix:** SOIL

Client Sample ID: SWMU 14-3 (25.5-26')
Collection Date: 7/18/2012 12:45:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
2-Chlorotoluene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Carbon disulfide	ND	1.97		µg/Kg-dry	1	7/20/2012 12:23:18 PM
4-Chlorotoluene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
cis-1,2-DCE	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
cis-1,3-Dichloropropene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2-Dibromo-3-chloropropane	ND	1.97		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Dibromochloromethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Dibromomethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2-Dichlorobenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,3-Dichlorobenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,4-Dichlorobenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Dichlorodifluoromethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,1-Dichloroethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,1-Dichloroethene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2-Dichloropropane	ND	1.97		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,3-Dichloropropane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
2,2-Dichloropropane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,1-Dichloropropene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Hexachlorobutadiene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Isopropylbenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
4-Isopropyltoluene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Methylene chloride	ND	1.97		µg/Kg-dry	1	7/20/2012 12:23:18 PM
n-Butylbenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
2-Hexanone	ND	1.97		µg/Kg-dry	1	7/20/2012 12:23:18 PM
n-Propylbenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
sec-Butylbenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Styrene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
4-Methyl-2-pentanone	ND	1.97		µg/Kg-dry	1	7/20/2012 12:23:18 PM
tert-Butylbenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,1,1,2-Tetrachloroethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,1,2,2-Tetrachloroethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Tetrachloroethene (PCE)	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
trans-1,2-DCE	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
trans-1,3-Dichloropropene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2,3-Trichlorobenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2,4-Trichlorobenzene	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,1,1-Trichloroethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,1,2-Trichloroethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Trichloroethene (TCE)	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Trichlorofluoromethane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
1,2,3-Trichloropropane	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 (25.5-26')
Project: SWMU NO.14
Collection Date: 7/18/2012 12:45:00 PM
Lab ID: 1207900-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.985		µg/Kg-dry	1	7/20/2012 12:23:18 PM
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%REC	1	7/20/2012 12:23:18 PM
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	1	7/20/2012 12:23:18 PM
Surr: Dibromofluoromethane	96.7	70-130		%REC	1	7/20/2012 12:23:18 PM
Surr: Toluene-d8	95.3	70-130		%REC	1	7/20/2012 12:23:18 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (48-50')
Project: SWMU NO.14
Collection Date: 7/18/2012 1:45:00 PM
Lab ID: 1207900-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/21/2012 5:05:39 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/21/2012 5:05:39 PM
Surr: DNOP	114	77.6-140		%REC	1	7/21/2012 5:05:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/25/2012 7:09:50 PM
Surr: BFB	100	84-116		%REC	1	7/25/2012 7:09:50 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:57:04 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:48:24 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:48:24 PM
Barium	750	5.0		mg/Kg	50	8/8/2012 10:50:18 AM
Beryllium	1.4	0.75		mg/Kg	5	8/5/2012 5:48:24 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:48:24 PM
Chromium	20	1.5		mg/Kg	5	8/5/2012 5:48:24 PM
Cobalt	6.7	1.5		mg/Kg	5	8/5/2012 5:48:24 PM
Iron	23000	500		mg/Kg	500	8/8/2012 10:52:45 AM
Lead	2.0	1.2		mg/Kg	5	8/5/2012 5:48:24 PM
Manganese	720	5.0		mg/Kg	50	8/8/2012 10:50:18 AM
Nickel	16	2.5		mg/Kg	5	8/5/2012 5:48:24 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:48:24 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:48:24 PM
Vanadium	ND	12		mg/Kg	5	8/5/2012 5:48:24 PM
Zinc	23	12		mg/Kg	5	8/5/2012 5:48:24 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Aniline	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Anthracene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Azobenzene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (48-50')
Project: SWMU NO.14
Collection Date: 7/18/2012 1:45:00 PM
Lab ID: 1207900-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Carbazole	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/25/2012 9:18:15 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Chrysene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/25/2012 9:18:15 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/25/2012 9:18:15 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 9:18:15 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/25/2012 9:18:15 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/25/2012 9:18:15 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Fluorene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Isophorone	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Naphthalene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (48-50')
Project: SWMU NO.14
Collection Date: 7/18/2012 1:45:00 PM
Lab ID: 1207900-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 9:18:15 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/25/2012 9:18:15 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/25/2012 9:18:15 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Phenol	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Pyrene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Pyridine	ND	0.50		mg/Kg	1	7/25/2012 9:18:15 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/25/2012 9:18:15 PM
Surr: 2,4,6-Tribromophenol	98.0	20.1-121		%REC	1	7/25/2012 9:18:15 PM
Surr: 2-Fluorobiphenyl	83.9	19-133		%REC	1	7/25/2012 9:18:15 PM
Surr: 2-Fluorophenol	79.3	20.2-108		%REC	1	7/25/2012 9:18:15 PM
Surr: 4-Terphenyl-d14	93.1	18.9-115		%REC	1	7/25/2012 9:18:15 PM
Surr: Nitrobenzene-d5	80.5	20.8-123		%REC	1	7/25/2012 9:18:15 PM
Surr: Phenol-d5	84.7	19.8-115		%REC	1	7/25/2012 9:18:15 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Toluene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Ethylbenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Xylenes, Total	ND	2.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Methyl tert-butyl ether (MTBE)	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2,4-Trimethylbenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,3,5-Trimethylbenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2-Dichloroethane (EDC)	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2-Dibromoethane (EDB)	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Naphthalene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1-Methylnaphthalene	ND	4.02		µg/Kg-dry	1	7/20/2012 12:53:16 PM
2-Methylnaphthalene	ND	4.02		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Acetone	ND	10.1		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Bromobenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Bromodichloromethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Bromoform	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
2-Butanone	ND	2.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Carbon tetrachloride	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Chlorobenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Chloroethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Chloroform	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (48-50')
Project: SWMU NO.14
Collection Date: 7/18/2012 1:45:00 PM
Lab ID: 1207900-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
2-Chlorotoluene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Carbon disulfide	ND	2.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
4-Chlorotoluene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
cis-1,2-DCE	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
cis-1,3-Dichloropropene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2-Dibromo-3-chloropropane	ND	2.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Dibromochloromethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Dibromomethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2-Dichlorobenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,3-Dichlorobenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,4-Dichlorobenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Dichlorodifluoromethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,1-Dichloroethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,1-Dichloroethene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2-Dichloropropane	ND	2.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,3-Dichloropropane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
2,2-Dichloropropane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,1-Dichloropropene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Hexachlorobutadiene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Isopropylbenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
4-Isopropyltoluene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Methylene chloride	ND	2.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
n-Butylbenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
2-Hexanone	ND	2.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
n-Propylbenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
sec-Butylbenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Styrene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
4-Methyl-2-pentanone	ND	2.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
tert-Butylbenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,1,1,2-Tetrachloroethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,1,2,2-Tetrachloroethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Tetrachloroethene (PCE)	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
trans-1,2-DCE	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
trans-1,3-Dichloropropene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2,3-Trichlorobenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2,4-Trichlorobenzene	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,1,1-Trichloroethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,1,2-Trichloroethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Trichloroethene (TCE)	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Trichlorofluoromethane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
1,2,3-Trichloropropane	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-1 (48-50')
Project: SWMU NO.14
Collection Date: 7/18/2012 1:45:00 PM
Lab ID: 1207900-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.01		µg/Kg-dry	1	7/20/2012 12:53:16 PM
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	7/20/2012 12:53:16 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1	7/20/2012 12:53:16 PM
Surr: Dibromofluoromethane	88.1	70-130		%REC	1	7/20/2012 12:53:16 PM
Surr: Toluene-d8	106	70-130		%REC	1	7/20/2012 12:53:16 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 GW
Project: SWMU NO.14
Collection Date: 7/18/2012 10:45:00 AM
Lab ID: 1207900-007
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	83	10		mg/L	10	7/22/2012 6:16:57 PM
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	7/22/2012 6:16:57 PM
Surr: DNOP	0	79.5-166	S	%REC	10	7/22/2012 6:16:57 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1.5	0.25		mg/L	5	7/25/2012 12:33:18 PM
Surr: BFB	121	69.8-119	S	%REC	5	7/25/2012 12:33:18 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	2.8	0.020	*	mg/L	10	8/20/2012 1:39:05 PM
Beryllium	0.042	0.020	*	mg/L	10	8/20/2012 1:39:05 PM
Cadmium	ND	0.020		mg/L	10	8/20/2012 1:39:05 PM
Chromium	0.38	0.060	*	mg/L	10	8/20/2012 1:39:05 PM
Cobalt	0.12	0.060		mg/L	10	8/20/2012 1:39:05 PM
Iron	120	10	*	mg/L	500	8/20/2012 1:45:48 PM
Manganese	45	0.20	*	mg/L	100	8/20/2012 1:42:17 PM
Nickel	0.18	0.10	*	mg/L	10	8/20/2012 1:39:05 PM
Silver	ND	0.050		mg/L	10	8/20/2012 1:39:05 PM
Vanadium	0.52	0.50		mg/L	10	8/20/2012 1:39:05 PM
Zinc	1.1	0.10		mg/L	10	8/20/2012 1:39:05 PM
EPA 200.8: METALS						Analyst: **SNV**
Antimony	ND	0.0025		mg/L	2.5	7/30/2012 7:13:25 PM
Arsenic	0.024	0.0025	*	mg/L	2.5	7/30/2012 7:13:25 PM
Lead	0.19	0.0050	*	mg/L	5	7/31/2012 12:35:17 PM
Selenium	0.0096	0.0025		mg/L	2.5	7/31/2012 12:31:20 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:38:23 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Acenaphthylene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Aniline	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Anthracene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Azobenzene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Benz(a)anthracene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Benzoic acid	ND	20		µg/L	1	7/24/2012 4:50:25 PM
Benzyl alcohol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/24/2012 4:50:25 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 GW
Project: SWMU NO.14
Collection Date: 7/18/2012 10:45:00 AM
Lab ID: 1207900-007
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/24/2012 4:50:25 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Carbazole	ND	10		µg/L	1	7/24/2012 4:50:25 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
4-Chloroaniline	ND	10		µg/L	1	7/24/2012 4:50:25 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
2-Chlorophenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Chrysene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Dibenzofuran	ND	10		µg/L	1	7/24/2012 4:50:25 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Diethyl phthalate	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Dimethyl phthalate	ND	10		µg/L	1	7/24/2012 4:50:25 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/24/2012 4:50:25 PM
2,4-Dimethylphenol	34	10		µg/L	1	7/24/2012 4:50:25 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/24/2012 4:50:25 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/24/2012 4:50:25 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Fluoranthene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Fluorene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Hexachlorobenzene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Hexachloroethane	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Isophorone	ND	10		µg/L	1	7/24/2012 4:50:25 PM
1-Methylnaphthalene	140	10		µg/L	1	7/24/2012 4:50:25 PM
2-Methylnaphthalene	77	10		µg/L	1	7/24/2012 4:50:25 PM
2-Methylphenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
3+4-Methylphenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/24/2012 4:50:25 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/24/2012 4:50:25 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 GW
Project: SWMU NO.14
Collection Date: 7/18/2012 10:45:00 AM
Lab ID: 1207900-007
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Naphthalene	24	10		µg/L	1	7/24/2012 4:50:25 PM
2-Nitroaniline	ND	10		µg/L	1	7/24/2012 4:50:25 PM
3-Nitroaniline	ND	10		µg/L	1	7/24/2012 4:50:25 PM
4-Nitroaniline	ND	20		µg/L	1	7/24/2012 4:50:25 PM
Nitrobenzene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
2-Nitrophenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
4-Nitrophenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Pentachlorophenol	ND	20		µg/L	1	7/24/2012 4:50:25 PM
Phenanthrene	20	10		µg/L	1	7/24/2012 4:50:25 PM
Phenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Pyrene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Pyridine	ND	10		µg/L	1	7/24/2012 4:50:25 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/24/2012 4:50:25 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/24/2012 4:50:25 PM
Surr: 2,4,6-Tribromophenol	68.1	44.2-126		%REC	1	7/24/2012 4:50:25 PM
Surr: 2-Fluorobiphenyl	74.1	37-114		%REC	1	7/24/2012 4:50:25 PM
Surr: 2-Fluorophenol	56.3	23.4-98		%REC	1	7/24/2012 4:50:25 PM
Surr: 4-Terphenyl-d14	59.4	41.3-116		%REC	1	7/24/2012 4:50:25 PM
Surr: Nitrobenzene-d5	81.2	39.5-118		%REC	1	7/24/2012 4:50:25 PM
Surr: Phenol-d5	42.4	20.9-95.9		%REC	1	7/24/2012 4:50:25 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	97	5.0		µg/L	5	7/25/2012 5:05:57 PM
Toluene	13	5.0		µg/L	5	7/25/2012 5:05:57 PM
Ethylbenzene	54	5.0		µg/L	5	7/25/2012 5:05:57 PM
Methyl tert-butyl ether (MTBE)	250	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2,4-Trimethylbenzene	82	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,3,5-Trimethylbenzene	5.7	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Naphthalene	45	10		µg/L	5	7/25/2012 5:05:57 PM
1-Methylnaphthalene	170	20		µg/L	5	7/25/2012 5:05:57 PM
2-Methylnaphthalene	110	20		µg/L	5	7/25/2012 5:05:57 PM
Acetone	ND	50		µg/L	5	7/25/2012 5:05:57 PM
Bromobenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Bromodichloromethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Bromoform	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Bromomethane	ND	15		µg/L	5	7/25/2012 5:05:57 PM
2-Butanone	ND	50		µg/L	5	7/25/2012 5:05:57 PM
Carbon disulfide	ND	50		µg/L	5	7/25/2012 5:05:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 GW
Project: SWMU NO.14
Collection Date: 7/18/2012 10:45:00 AM
Lab ID: 1207900-007
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon Tetrachloride	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Chlorobenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Chloroethane	ND	10		µg/L	5	7/25/2012 5:05:57 PM
Chloroform	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Chloromethane	ND	15		µg/L	5	7/25/2012 5:05:57 PM
2-Chlorotoluene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
4-Chlorotoluene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
cis-1,2-DCE	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	7/25/2012 5:05:57 PM
Dibromochloromethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Dibromomethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Dichlorodifluoromethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,1-Dichloroethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,1-Dichloroethene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2-Dichloropropane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,3-Dichloropropane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
2,2-Dichloropropane	ND	10		µg/L	5	7/25/2012 5:05:57 PM
1,1-Dichloropropene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Hexachlorobutadiene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
2-Hexanone	ND	50		µg/L	5	7/25/2012 5:05:57 PM
Isopropylbenzene	8.1	5.0		µg/L	5	7/25/2012 5:05:57 PM
4-Isopropyltoluene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	7/25/2012 5:05:57 PM
Methylene Chloride	ND	15		µg/L	5	7/25/2012 5:05:57 PM
n-Butylbenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
n-Propylbenzene	12	5.0		µg/L	5	7/25/2012 5:05:57 PM
sec-Butylbenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Styrene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
tert-Butylbenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	7/25/2012 5:05:57 PM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
trans-1,2-DCE	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-3 GW
Project: SWMU NO.14
Collection Date: 7/18/2012 10:45:00 AM
Lab ID: 1207900-007
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Trichloroethene (TCE)	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Trichlorofluoromethane	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
1,2,3-Trichloropropane	ND	10		µg/L	5	7/25/2012 5:05:57 PM
Vinyl chloride	ND	5.0		µg/L	5	7/25/2012 5:05:57 PM
Xylenes, Total	44	7.5		µg/L	5	7/25/2012 5:05:57 PM
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%REC	5	7/25/2012 5:05:57 PM
Surr: 4-Bromofluorobenzene	91.2	70-130		%REC	5	7/25/2012 5:05:57 PM
Surr: Dibromofluoromethane	122	70-130		%REC	5	7/25/2012 5:05:57 PM
Surr: Toluene-d8	107	70-130		%REC	5	7/25/2012 5:05:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 1:15:00 PM
Lab ID: 1207900-008
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/21/2012 3:14:28 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/21/2012 3:14:28 PM
Surr: DNOP	137	79.5-166		%REC	1	7/21/2012 3:14:28 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/25/2012 12:08:08 AM
Surr: BFB	112	69.8-119		%REC	1	7/25/2012 12:08:08 AM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	8/17/2012 12:12:31 PM
Beryllium	ND	0.0020		mg/L	1	8/17/2012 12:12:31 PM
Cadmium	ND	0.0020		mg/L	1	8/17/2012 12:12:31 PM
Chromium	ND	0.0060		mg/L	1	8/17/2012 12:12:31 PM
Cobalt	ND	0.0060		mg/L	1	8/17/2012 12:12:31 PM
Iron	ND	0.020		mg/L	1	8/17/2012 12:12:31 PM
Manganese	ND	0.0020		mg/L	1	8/17/2012 12:12:31 PM
Nickel	ND	0.010		mg/L	1	8/17/2012 12:12:31 PM
Silver	ND	0.0050		mg/L	1	8/17/2012 12:12:31 PM
Vanadium	ND	0.050		mg/L	1	8/17/2012 12:12:31 PM
Zinc	ND	0.010		mg/L	1	8/20/2012 1:49:17 PM
EPA 200.8: METALS						Analyst: **SNV**
Antimony	ND	0.0010		mg/L	1	7/31/2012 6:32:29 PM
Arsenic	ND	0.0010		mg/L	1	7/31/2012 6:32:29 PM
Lead	ND	0.0010		mg/L	1	7/31/2012 6:32:29 PM
Selenium	ND	0.0010		mg/L	1	7/31/2012 6:32:29 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:40:09 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Aniline	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Anthracene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Azobenzene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Benzoic acid	ND	20		µg/L	1	7/25/2012 11:46:55 AM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 11:46:55 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 1:15:00 PM
Lab ID: 1207900-008
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 11:46:55 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Carbazole	ND	10		µg/L	1	7/25/2012 11:46:55 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Chrysene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 11:46:55 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 11:46:55 AM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 11:46:55 AM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 11:46:55 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Fluoranthene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Fluorene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Isophorone	ND	10		µg/L	1	7/25/2012 11:46:55 AM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 11:46:55 AM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 11:46:55 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 1:15:00 PM
Lab ID: 1207900-008
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Naphthalene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 11:46:55 AM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 11:46:55 AM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 11:46:55 AM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 11:46:55 AM
Phenanthrene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Phenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Pyrene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Pyridine	ND	10		µg/L	1	7/25/2012 11:46:55 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 11:46:55 AM
Surr: 2,4,6-Tribromophenol	89.5	44.2-126		%REC	1	7/25/2012 11:46:55 AM
Surr: 2-Fluorobiphenyl	72.2	37-114		%REC	1	7/25/2012 11:46:55 AM
Surr: 2-Fluorophenol	58.5	23.4-98		%REC	1	7/25/2012 11:46:55 AM
Surr: 4-Terphenyl-d14	79.6	41.3-116		%REC	1	7/25/2012 11:46:55 AM
Surr: Nitrobenzene-d5	69.3	39.5-118		%REC	1	7/25/2012 11:46:55 AM
Surr: Phenol-d5	43.5	20.9-95.9		%REC	1	7/25/2012 11:46:55 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 7:12:30 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 7:12:30 PM
Acetone	ND	10		µg/L	1	7/23/2012 7:12:30 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 7:12:30 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 7:12:30 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 7:12:30 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 1:15:00 PM
Lab ID: 1207900-008
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 7:12:30 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 7:12:30 PM
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 7:12:30 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 7:12:30 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 1:15:00 PM
Lab ID: 1207900-008
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 7:12:30 PM
Surr: 1,2-Dichloroethane-d4	88.9	70-130		%REC	1	7/23/2012 7:12:30 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	1	7/23/2012 7:12:30 PM
Surr: Dibromofluoromethane	118	70-130		%REC	1	7/23/2012 7:12:30 PM
Surr: Toluene-d8	102	70-130		%REC	1	7/23/2012 7:12:30 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207900-009
Matrix: TRIP BLANK
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 8:12:02 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 8:12:02 PM
Acetone	ND	10		µg/L	1	7/23/2012 8:12:02 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 8:12:02 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 8:12:02 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 8:12:02 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 8:12:02 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 8:12:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207900-009
Matrix: TRIP BLANK
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 8:12:02 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 8:12:02 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 8:12:02 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	7/23/2012 8:12:02 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	7/23/2012 8:12:02 PM
Surr: Dibromofluoromethane	125	70-130		%REC	1	7/23/2012 8:12:02 PM
Surr: Toluene-d8	99.2	70-130		%REC	1	7/23/2012 8:12:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MEOH BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207900-010
Matrix: MEOH BLAN
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/25/2012 7:38:36 PM
Surr: BFB	99.2	84-116		%REC	1	7/25/2012 7:38:36 PM
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Benzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Toluene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Naphthalene	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 3:54:46 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 3:54:46 PM
Acetone	ND	0.75		mg/Kg	1	7/25/2012 3:54:46 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Bromoform	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Bromomethane	ND	0.15		mg/Kg	1	7/25/2012 3:54:46 PM
2-Butanone	ND	0.50		mg/Kg	1	7/25/2012 3:54:46 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/25/2012 3:54:46 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Chloroethane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Chloroform	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Chloromethane	ND	0.15		mg/Kg	1	7/25/2012 3:54:46 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MEOH BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207900-010
Matrix: MEOH BLAN
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/25/2012 3:54:46 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/25/2012 3:54:46 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/25/2012 3:54:46 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Styrene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Vinyl chloride	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%REC	1	7/25/2012 3:54:46 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	7/25/2012 3:54:46 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	7/25/2012 3:54:46 PM
Surr: Toluene-d8	97.2	70-130		%REC	1	7/25/2012 3:54:46 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724057
Project Name: 1207900

Analytical Results Report

Sample Number 120724057-001 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207900-001D / SWMU 14-3 (0-0.5') **Sampling Time** 11:25 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.479	7/31/2012	CRW	EPA 335.4	
%moisture	5.6	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724057-002 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207900-002D / SWMU 14-3 (1.5-2') **Sampling Time** 12:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.77	mg/Kg	0.565	7/31/2012	CRW	EPA 335.4	
%moisture	13.3	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724057-003 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207900-003D / SWMU 14-3 (8-10') **Sampling Time** 12:15 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.567	7/31/2012	CRW	EPA 335.4	M2
%moisture	16.7	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724057
Project Name: 1207900

Analytical Results Report

Sample Number 120724057-004 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207900-004D / SWMU 14-3 (12-14') **Sampling Time** 12:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.604	7/31/2012	CRW	EPA 335.4	M2
%moisture	17.5	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724057-005 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207900-005D / SWMU 14-3 (25.5-26') **Sampling Time** 12:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.55	7/31/2012	CRW	EPA 335.4	M2
%moisture	10.2	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724057-006 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207900-006D / SWMU 14-1 (48-50') **Sampling Time** 1:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.569	7/31/2012	CRW	EPA 335.4	M2
%moisture	11.6	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	120724057
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1207900
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	120724057-007	**Sampling Date**	7/18/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207900-008F / FB071812	**Sampling Time**	1:15 PM		
Matrix	Water				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable. Potential matrix effect
MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139688** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139689** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0.0005000	98.2	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.7	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.6	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Nickel	0.46	0.010	0.5000	0	92.5	85	115			
Silver	0.097	0.0050	0.1000	0	96.9	85	115			
Vanadium	0.50	0.050	0.5000	0	101	85	115			

Sample ID **1207807-002BMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139709** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.60	0.0020	0.5000	0.08916	102	70	130			

Sample ID **1207807-002BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.59	0.0020	0.5000	0.08916	99.9	70	130	1.42	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140608** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.48	0.010	0.5000	0	95.6	85	115			

Sample ID **1207B81-004AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140624** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.47	0.010	0.5000	0.009760	92.7	70	130			

Sample ID **1207B81-004AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140625** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.47	0.010	0.5000	0.009760	92.2	70	130	0.517	20	

Sample ID **MB-3063** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **3063** RunNo: **4970**
Prep Date: **7/27/2012** Analysis Date: **8/20/2012** SeqNo: **141512** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS-3063** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **3063** RunNo: **4970**
Prep Date: **7/27/2012** Analysis Date: **8/20/2012** SeqNo: **141513** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.0	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.6	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.0	85	115			
Manganese	0.48	0.0020	0.5000	0	96.7	85	115			
Nickel	0.47	0.010	0.5000	0	94.3	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Vanadium	0.50	0.050	0.5000	0	101	85	115			
Zinc	0.48	0.010	0.5000	0	96.1	85	115			

Sample ID **MB-3063** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **3063** RunNo: **4970**
Prep Date: **7/27/2012** Analysis Date: **8/20/2012** SeqNo: **141514** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS-3063** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **3063** RunNo: **4970**
Prep Date: **7/27/2012** Analysis Date: **8/20/2012** SeqNo: **141515** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.51	0.020	0.5000	0	101	85	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3063** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **3063** RunNo: **4564**
Prep Date: **7/27/2012** Analysis Date: **7/31/2012** SeqNo: **128125** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								
Selenium	ND	0.0025								

Sample ID **1207508-003AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128501** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.033	0.0010	0.02500	0.008736	97.7	70	130			

Sample ID **1207608-004AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128507** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	70	130			
Arsenic	0.025	0.0010	0.02500	0	99.9	70	130			
Selenium	0.025	0.0010	0.02500	0	102	70	130			

Sample ID **1207806-004AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128522** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	70	130			
Arsenic	0.025	0.0010	0.02500	0	100	70	130			
Selenium	0.029	0.0010	0.02500	0.004090	98.9	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128780** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.028	0.0010	0.02500	0	112	85	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Metals**		
Client ID: **LCSW**	Batch ID: **R4578**	RunNo: **4578**		
Prep Date:	Analysis Date: **7/31/2012**	SeqNo: **128781**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.024	0.0010	0.02500	0	97.4	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Metals**		
Client ID: **PBW**	Batch ID: **R4578**	RunNo: **4578**		
Prep Date:	Analysis Date: **7/31/2012**	SeqNo: **128782**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Metals**		
Client ID: **PBW**	Batch ID: **R4578**	RunNo: **4578**		
Prep Date:	Analysis Date: **7/31/2012**	SeqNo: **128784**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**MB-2979**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**PBW**	Batch ID:	**2979**	RunNo:	**4384**					
Prep Date:	**7/23/2012**	Analysis Date:	**7/24/2012**	SeqNo:	**122185**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-2979**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**LCSW**	Batch ID:	**2979**	RunNo:	**4384**					
Prep Date:	**7/23/2012**	Analysis Date:	**7/24/2012**	SeqNo:	**122186**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.7	80	120			

Sample ID	**1207546-001BMS**	SampType:	**MS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**BatchQC**	Batch ID:	**2979**	RunNo:	**4384**					
Prep Date:	**7/23/2012**	Analysis Date:	**7/24/2012**	SeqNo:	**122188**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	84.4	75	125			

Sample ID	**1207546-001BMSD**	SampType:	**MSD**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**BatchQC**	Batch ID:	**2979**	RunNo:	**4384**					
Prep Date:	**7/23/2012**	Analysis Date:	**7/24/2012**	SeqNo:	**122191**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0	79.7	75	125	5.66	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2936**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **2936**	RunNo: **4208**
Prep Date: **7/20/2012**	Analysis Date: **7/21/2012**	SeqNo: **120444** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		117	77.6	140			

Sample ID **LCS-2936**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **2936**	RunNo: **4208**
Prep Date: **7/20/2012**	Analysis Date: **7/21/2012**	SeqNo: **120445** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.5	52.6	130			
Surr: DNOP	4.6		5.000		91.7	77.6	140			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2935** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **PBW** Batch ID: **2935** RunNo: **4172**
Prep Date: **7/20/2012** Analysis Date: **7/20/2012** SeqNo: **120217** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		125	79.5	166			

Sample ID **LCS-2935** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSW** Batch ID: **2935** RunNo: **4172**
Prep Date: **7/20/2012** Analysis Date: **7/20/2012** SeqNo: **120243** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.0	74	157			
Surr: DNOP	0.50		0.5000		99.4	79.5	166			

Sample ID **LCSD-2935** SampType: **LCSD** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSS02** Batch ID: **2935** RunNo: **4172**
Prep Date: **7/20/2012** Analysis Date: **7/20/2012** SeqNo: **120288** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	93.2	74	157	0.819	23	
Surr: DNOP	0.50		0.5000		101	79.5	166	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R4415** RunNo: **4415**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123776** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		98.5	84	116			

Sample ID **2.5UG GRO LCSB** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R4415** RunNo: **4415**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123777** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	85	115			
Surr: BFB	1000		1000		103	84	116			

Sample ID **1207A80-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4415** RunNo: **4415**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123779** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	89	25	93.31	0	95.2	70	130			
Surr: BFB	3800		3732		103	84	116			

Sample ID **1207A80-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4415** RunNo: **4415**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123780** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	89	25	93.31	0	95.1	70	130	0.168	22.1	
Surr: BFB	3900		3732		104	84	116	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122827** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.5	69.8	119			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122828** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	75.9	119			
Surr: BFB	21		20.00		103	69.8	119			

Sample ID **1207819-004AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122835** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.7	0.25	2.500	2.307	94.7	75.4	121			
Surr: BFB	100		100.0		103	69.8	119			

Sample ID **1207819-004AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122836** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.1	0.25	2.500	2.307	71.5	75.4	121	13.2	10.5	SR
Surr: BFB	96		100.0		96.5	69.8	119	0	0	

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R4435** RunNo: **4435**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123768** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.4	69.8	119			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R4435** RunNo: **4435**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123769** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.0	75.9	119			
Surr: BFB	18		20.00		90.7	69.8	119			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R4233**	RunNo: **4233**	
Prep Date:	Analysis Date: **7/21/2012**	SeqNo: **121267**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b5** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	107	70.7	123			
Toluene	1.1	0.050	1.000	0	107	80	120			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	99.0	63.1	148			
Trichloroethene (TCE)	0.89	0.050	1.000	0	88.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		121	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		89.3	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID **1207900-002b ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 14-3 (1.5-2')** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.6439	0.006767	108	81.3	119			
Toluene	0.65	0.050	0.6439	0	100	75	121			
Chlorobenzene	0.64	0.050	0.6439	0	99.6	78.5	120			
1,1-Dichloroethene	0.68	0.050	0.6439	0	106	75.3	115			
Trichloroethene (TCE)	0.61	0.050	0.6439	0	94.7	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		97.6	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3220		97.9	70	130			
Surr: Dibromofluoromethane	0.32		0.3220		98.8	70	130			
Surr: Toluene-d8	0.32		0.3220		101	70	130			

Sample ID **1207900-002b msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 14-3 (1.5-2')** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121270** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6439	0.006767	103	81.3	119	4.25	15.7	
Toluene	0.63	0.050	0.6439	0	98.3	75	121	2.14	16.2	
Chlorobenzene	0.65	0.050	0.6439	0	101	78.5	120	1.27	14.9	
1,1-Dichloroethene	0.60	0.050	0.6439	0	93.7	75.3	115	12.0	31.8	
Trichloroethene (TCE)	0.55	0.050	0.6439	0	85.7	67.8	119	10.0	16.5	
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.3220		97.7	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3220		92.3	70	130	0	0	
Surr: Toluene-d8	0.32		0.3220		100	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R4379**	RunNo: **4379**	
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **122014**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	105	70.7	123			
Toluene	0.96	0.050	1.000	0	95.5	80	120			
Chlorobenzene	0.98	0.050	1.000	0	97.9	70	130			
1,1-Dichloroethene	0.93	0.050	1.000	0	92.5	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207940-007b ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122016** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	44	2.5	42.92	2.856	95.9	81.3	119			
Toluene	56	2.5	42.92	14.08	97.1	75	121			
Chlorobenzene	42	2.5	42.92	0	97.1	78.5	120			
1,1-Dichloroethene	39	2.5	42.92	0	91.6	75.3	115			
Trichloroethene (TCE)	37	2.5	42.92	0	85.1	67.8	119			
Surr: 1,2-Dichloroethane-d4	20		21.46		92.0	70	130			
Surr: 4-Bromofluorobenzene	20		21.46		93.8	70	130			
Surr: Dibromofluoromethane	22		21.46		101	70	130			
Surr: Toluene-d8	22		21.46		102	70	130			

Sample ID **1207940-007b msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122017** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	42.92	2.856	93.9	81.3	119	1.96	15.7	
Toluene	54	2.5	42.92	14.08	92.6	75	121	3.49	16.2	
Chlorobenzene	42	2.5	42.92	0	97.0	78.5	120	0.0484	14.9	
1,1-Dichloroethene	37	2.5	42.92	0	85.4	75.3	115	7.02	31.8	
Trichloroethene (TCE)	36	2.5	42.92	0	84.2	67.8	119	1.08	16.5	
Surr: 1,2-Dichloroethane-d4	20		21.46		94.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	20		21.46		92.2	70	130	0	0	
Surr: Dibromofluoromethane	23		21.46		106	70	130	0	0	
Surr: Toluene-d8	21		21.46		99.9	70	130	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2930**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **2930**	RunNo: **4215**			
Prep Date: **7/20/2012**	Analysis Date: **7/20/2012**	SeqNo: **120455**	Units: **µg/Kg-dry**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.00								
Toluene	ND	1.00								
Ethylbenzene	ND	1.00								
Xylenes, Total	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	1.00								
1,2,4-Trimethylbenzene	ND	1.00								
1,3,5-Trimethylbenzene	ND	1.00								
1,2-Dichloroethane (EDC)	ND	1.00								
1,2-Dibromoethane (EDB)	ND	1.00								
Naphthalene	ND	1.00								
1-Methylnaphthalene	ND	4.00								
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	1.00								
Bromodichloromethane	ND	1.00								
Bromoform	ND	1.00								
2-Butanone	ND	2.00								
Carbon tetrachloride	ND	1.00								
Chlorobenzene	ND	1.00								
Chloroethane	ND	1.00								
Chloroform	ND	1.00								
Chloromethane	ND	1.00								
2-Chlorotoluene	ND	1.00								
Carbon disulfide	ND	2.00								
4-Chlorotoluene	ND	1.00								
cis-1,2-DCE	ND	1.00								
cis-1,3-Dichloropropene	ND	1.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	1.00								
Dibromomethane	ND	1.00								
1,2-Dichlorobenzene	ND	1.00								
1,3-Dichlorobenzene	ND	1.00								
1,4-Dichlorobenzene	ND	1.00								
Dichlorodifluoromethane	ND	1.00								
1,1-Dichloroethane	ND	1.00								
1,1-Dichloroethene	ND	1.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	1.00								
2,2-Dichloropropane	ND	1.00								
1,1-Dichloropropene	ND	1.00								
Hexachlorobutadiene	ND	1.00								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2930** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **2930** RunNo: **4215**
Prep Date: **7/20/2012** Analysis Date: **7/20/2012** SeqNo: **120455** Units: **µg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.00								
4-Isopropyltoluene	ND	1.00								
Methylene chloride	ND	2.00								
n-Butylbenzene	ND	1.00								
2-Hexanone	ND	2.00								
n-Propylbenzene	ND	1.00								
sec-Butylbenzene	ND	1.00								
Styrene	ND	1.00								
4-Methyl-2-pentanone	ND	2.00								
tert-Butylbenzene	ND	1.00								
1,1,1,2-Tetrachloroethane	ND	1.00								
1,1,2,2-Tetrachloroethane	ND	1.00								
Tetrachloroethene (PCE)	ND	1.00								
trans-1,2-DCE	ND	1.00								
trans-1,3-Dichloropropene	ND	1.00								
1,2,3-Trichlorobenzene	ND	1.00								
1,2,4-Trichlorobenzene	ND	1.00								
1,1,1-Trichloroethane	ND	1.00								
1,1,2-Trichloroethane	ND	1.00								
Trichloroethene (TCE)	ND	1.00								
Trichlorofluoromethane	ND	1.00								
1,2,3-Trichloropropane	ND	1.00								
Vinyl chloride	ND	1.00								
Surr: 1,2-Dichloroethane-d4	52.9		50.00		106	70	130			
Surr: 4-Bromofluorobenzene	48.7		50.00		97.4	70	130			
Surr: Dibromofluoromethane	46.6		50.00		93.2	70	130			
Surr: Toluene-d8	50.9		50.00		102	70	130			

Sample ID **lcs-2930** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **2930** RunNo: **4215**
Prep Date: **7/20/2012** Analysis Date: **7/20/2012** SeqNo: **120456** Units: **µg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.0	1.00	10.00	0	110	60	140			
Toluene	10.6	1.00	10.00	0	106	60	140			
Chlorobenzene	10.9	1.00	10.00	0	109	60	140			
1,1-Dichloroethene	11.9	1.00	10.00	0	119	60	140			
Trichloroethene (TCE)	11.1	1.00	10.00	0	111	60	140			
Surr: 1,2-Dichloroethane-d4	51.8		50.00		104	70	130			
Surr: 4-Bromofluorobenzene	47.6		50.00		95.1	70	130			
Surr: Dibromofluoromethane	47.2		50.00		94.3	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**lcs-2930**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**2930**	RunNo:	**4215**
Prep Date:	**7/20/2012**	Analysis Date:	**7/20/2012**	SeqNo:	**120456** Units: **µg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	49.8		50.00		99.7	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4233**	RunNo: **4233**			
Prep Date:	Analysis Date: **7/20/2012**	SeqNo: **120975**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120975** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120980** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.6	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120980** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **1207711-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120981** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	66.8	128			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **1207711-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120982** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	66.8	128	0.0297	16.7	
Toluene	22	1.0	20.00	0	110	70	130	4.99	18.7	
Chlorobenzene	21	1.0	20.00	0	104	70	130	0.103	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	7.04	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.3	70	130	2.25	17.5	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		119	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Sample ID **100ng lcsb** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **121820** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	93.4	80	120			
Chlorobenzene	19	1.0	20.00	0	97.1	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	83	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcsb** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **121820** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	21	1.0	20.00	0	104	76.2	119			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID **1207855-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **121821** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	19	1.0	20.00	0	93.3	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	112	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		112	70	130			
Surr: 4-Bromofluorobenzene	8.0		10.00		80.1	70	130			
Surr: Dibromofluoromethane	13		10.00		130	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

Sample ID **1207855-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **121822** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	19	1.0	20.00	0	94.4	70	130	1.11	19.5	
1,1-Dichloroethene	20	1.0	20.00	0	99.3	70	130	12.5	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	93.1	70	130	18.0	17.5	R
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.2		10.00		82.4	70	130	0	0	
Surr: Dibromofluoromethane	12		10.00		115	70	130	0	0	
Surr: Toluene-d8	11		10.00		110	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4379**	RunNo: **4379**			
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **122005**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122008** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	95.5	80	120			
Chlorobenzene	20	1.0	20.00	0	97.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.5	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5 ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4375**	RunNo: **4375**			
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **123094**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5 ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R4375**	RunNo: **4375**
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **123094** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R4433**	RunNo: **4433**
Prep Date:	Analysis Date: **7/25/2012**	SeqNo: **123684** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R4433**	RunNo: **4433**	
Prep Date:	Analysis Date: **7/25/2012**	SeqNo: **123684**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4433** RunNo: **4433**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123684** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	12		10.00		117	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	14		10.00		140	70	130			S
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4433** RunNo: **4433**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123687** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	84.1	126			
Toluene	19	1.0	20.00	0	96.1	80	120			
Chlorobenzene	19	1.0	20.00	0	95.5	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	83	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.6	76.2	119			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		116	70	130			
Surr: Dibromofluoromethane	12		10.00		119	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Sample ID **1207794-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4433** RunNo: **4433**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123688** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207794-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4433** RunNo: **4433**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123688** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	120	5.0	100.0	0	123	66.8	128			
Toluene	100	5.0	100.0	0	103	70	130			
Chlorobenzene	99	5.0	100.0	0	98.6	70	130			
1,1-Dichloroethene	110	5.0	100.0	0	112	70	130			
Trichloroethene (TCE)	100	5.0	100.0	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	54		50.00		108	70	130			
Surr: 4-Bromofluorobenzene	51		50.00		103	70	130			
Surr: Dibromofluoromethane	66		50.00		131	70	130			S
Surr: Toluene-d8	53		50.00		105	70	130			

Sample ID **1207a11-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4433** RunNo: **4433**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123689** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9600	100	2000	7757	91.5	66.8	128			
Chlorobenzene	1900	100	2000	0	92.8	70	130			
1,1-Dichloroethene	2000	100	2000	0	101	70	130			
Trichloroethene (TCE)	2000	100	2000	0	97.6	70	130			
Surr: 1,2-Dichloroethane-d4	980		1000		97.6	70	130			
Surr: 4-Bromofluorobenzene	950		1000		95.2	70	130			
Surr: Dibromofluoromethane	1300		1000		126	70	130			
Surr: Toluene-d8	1100		1000		108	70	130			

Sample ID **1207794-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4433** RunNo: **4433**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123690** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	120	5.0	100.0	0	117	66.8	128	5.19	16.7	
Toluene	100	5.0	100.0	0	103	70	130	0.0720	18.7	
Chlorobenzene	99	5.0	100.0	0	99.4	70	130	0.818	19.5	
1,1-Dichloroethene	92	5.0	100.0	0	91.9	70	130	20.1	16.7	R
Trichloroethene (TCE)	93	5.0	100.0	0	93.1	70	130	11.1	17.5	
Surr: 1,2-Dichloroethane-d4	50		50.00		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	52		50.00		105	70	130	0	0	
Surr: Dibromofluoromethane	62		50.00		123	70	130	0	0	
Surr: Toluene-d8	52		50.00		104	70	130	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207a11-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4433** RunNo: **4433**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123691** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9700	100	2000	7757	98.3	66.8	128	1.41	16.7	
Chlorobenzene	1900	100	2000	0	96.4	70	130	3.83	19.5	
1,1-Dichloroethene	2000	100	2000	0	102	70	130	0.569	16.7	
Trichloroethene (TCE)	1900	100	2000	0	92.6	70	130	5.27	17.5	
Surr: 1,2-Dichloroethane-d4	1100		1000		106	70	130	0	0	
Surr: 4-Bromofluorobenzene	1000		1000		101	70	130	0	0	
Surr: Dibromofluoromethane	1300		1000		135	70	130	0	0	S
Surr: Toluene-d8	1100		1000		106	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125370** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R4468**	RunNo: **4468**	
Prep Date:	Analysis Date: **7/25/2012**	SeqNo: **125370**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.5	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125370** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125371** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	21	1.0	20.00	0	106	80	120			
Chlorobenzene	20	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.8	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125372** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	84.1	126			
Toluene	20	1.0	20.00	0	99.6	80	120			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	88.2	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	82.9	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **1207949-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125377** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7848	97.9	66.8	128			
Toluene	21	1.0	20.00	0.7920	102	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.2	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207949-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125377** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **1207a22-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125378** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	990	50	1000	0	99.1	70	130			
1,1-Dichloroethene	910	50	1000	0	91.0	70	130			
Trichloroethene (TCE)	870	50	1000	0	86.7	70	130			
Surr: 1,2-Dichloroethane-d4	460		500.0		92.4	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.8	70	130			
Surr: Dibromofluoromethane	510		500.0		102	70	130			
Surr: Toluene-d8	500		500.0		101	70	130			

Sample ID **1207a22-002amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125380** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	1000	50	1000	0	101	70	130	1.54	19.5	
1,1-Dichloroethene	870	50	1000	0	86.5	70	130	4.99	16.7	
Trichloroethene (TCE)	850	50	1000	0	85.2	70	130	1.72	17.5	
Surr: 1,2-Dichloroethane-d4	470		500.0		93.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	480		500.0		96.2	70	130	0	0	
Surr: Dibromofluoromethane	520		500.0		104	70	130	0	0	
Surr: Toluene-d8	520		500.0		105	70	130	0	0	

Sample ID **1207949-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125381** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7848	97.8	66.8	128	0.104	16.7	
Toluene	20	1.0	20.00	0.7920	96.9	70	130	4.87	18.7	
Chlorobenzene	19	1.0	20.00	0	96.2	70	130	7.41	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	87.7	70	130	3.88	16.7	
Trichloroethene (TCE)	17	1.0	20.00	0	83.0	70	130	2.51	17.5	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.5	70	130	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207949-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125381** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		107	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID **b15** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125426** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b15**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R4468**	RunNo: **4468**	
Prep Date:	Analysis Date: **7/26/2012**	SeqNo: **125426**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2962**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **2962**	RunNo: **4428**			
Prep Date: **7/23/2012**	Analysis Date: **7/25/2012**	SeqNo: **123425**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2962** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **2962** RunNo: **4428**
Prep Date: **7/23/2012** Analysis Date: **7/25/2012** SeqNo: **123425** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		94.9	20.1	121			
Surr: 2-Fluorobiphenyl	1.5		1.670		86.9	19	133			
Surr: 2-Fluorophenol	2.4		3.330		73.0	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		91.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		79.4	20.8	123			
Surr: Phenol-d5	2.6		3.330		78.8	19.8	115			

Sample ID **lcs-2962** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2962** RunNo: **4428**
Prep Date: **7/23/2012** Analysis Date: **7/25/2012** SeqNo: **123426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-2962** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2962** RunNo: **4428**
Prep Date: **7/23/2012** Analysis Date: **7/25/2012** SeqNo: **123426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	72.7	49.7	98.1			
4-Chloro-3-methylphenol	2.5	0.50	3.330	0	73.7	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	62.5	41.1	96.9			
1,4-Dichlorobenzene	0.96	0.20	1.670	0	57.6	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	83.6	44.4	104			
N-Nitrosodi-n-propylamine	1.3	0.20	1.670	0	75.2	39.1	86.9			
4-Nitrophenol	2.7	0.25	3.330	0	79.7	44.2	107			
Pentachlorophenol	2.4	0.40	3.330	0	71.3	36.2	80			
Phenol	2.3	0.20	3.330	0	69.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	71.1	34.7	98.8			
1,2,4-Trichlorobenzene	1.1	0.20	1.670	0	66.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		100	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		77.9	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.4	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		89.3	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		73.4	20.8	123			
Surr: Phenol-d5	2.6		3.330		78.5	19.8	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2989**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **2989**	RunNo: **4400**			
Prep Date: **7/24/2012**	Analysis Date: **7/24/2012**	SeqNo: **122513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2989**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **2989**	RunNo: **4400**			
Prep Date: **7/24/2012**	Analysis Date: **7/24/2012**	SeqNo: **122513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	170		200.0		85.4	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		85.5	37	114			
Surr: 2-Fluorophenol	120		200.0		61.4	23.4	98			
Surr: 4-Terphenyl-d14	79		100.0		79.3	41.3	116			
Surr: Nitrobenzene-d5	84		100.0		84.2	39.5	118			
Surr: Phenol-d5	110		200.0		53.2	20.9	95.9			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-2989** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **2989** RunNo: **4400**
Prep Date: **7/24/2012** Analysis Date: **7/24/2012** SeqNo: **122514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.1	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	35.5	108			
2-Chlorophenol	130	10	200.0	0	62.6	29.8	106			
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5			
2,4-Dinitrotoluene	83	10	100.0	0	82.7	44.7	112			
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.3	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	61.2	20.2	93			
Phenol	84	10	200.0	0	42.0	23	66.1			
Pyrene	71	10	100.0	0	71.2	40.1	101			
1,2,4-Trichlorobenzene	54	10	100.0	0	53.7	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		81.9	44.2	126			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	37	114			
Surr: 2-Fluorophenol	98		200.0		49.2	23.4	98			
Surr: 4-Terphenyl-d14	71		100.0		70.6	41.3	116			
Surr: Nitrobenzene-d5	65		100.0		65.1	39.5	118			
Surr: Phenol-d5	91		200.0		45.5	20.9	95.9			

Sample ID **lcsd-2989** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **2989** RunNo: **4400**
Prep Date: **7/24/2012** Analysis Date: **7/24/2012** SeqNo: **122515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	69.9	38.2	99.4	2.61	20	
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	35.5	108	13.1	20	
2-Chlorophenol	110	10	200.0	0	55.6	29.8	106	11.9	20	
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5	0.0854	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.2	44.7	112	9.75	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.6	38.5	105	5.82	20	
4-Nitrophenol	92	10	200.0	0	46.1	11.6	73.1	2.55	20	
Pentachlorophenol	110	20	200.0	0	57.5	20.2	93	6.30	20	
Phenol	83	10	200.0	0	41.5	23	66.1	1.15	20	
Pyrene	71	10	100.0	0	71.2	40.1	101	0	20	
1,2,4-Trichlorobenzene	56	10	100.0	0	55.5	37.7	99.1	3.33	20	
Surr: 2,4,6-Tribromophenol	150		200.0		75.1	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	73		100.0		73.1	37	114	0	0	
Surr: 2-Fluorophenol	81		200.0		40.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	80		100.0		79.8	41.3	116	0	0	
Surr: Nitrobenzene-d5	70		100.0		70.1	39.5	118	0	0	
Surr: Phenol-d5	88		200.0		44.2	20.9	95.9	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3131** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128955** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-3131** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128956** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	93.3	80	120			

Sample ID **1207B18-001BMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128971** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.21	0.033	0.1648	0.06444	87.3	75	125			

Sample ID **1207B18-001BMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128972** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1651	0.06444	84.5	75	125	2.10	20	

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**MB-3009**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**3009**	RunNo:	**4698**
Prep Date:	**7/24/2012**	Analysis Date:	**8/6/2012**	SeqNo:	**132140** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	**LCS-3009**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**3009**	RunNo:	**4698**
Prep Date:	**7/24/2012**	Analysis Date:	**8/6/2012**	SeqNo:	**132141** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.9555	99.3	80	120			

Sample ID	**MB-3009**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**3009**	RunNo:	**4699**
Prep Date:	**7/24/2012**	Analysis Date:	**8/5/2012**	SeqNo:	**132220** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	**LCS-3009**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**3009**	RunNo:	**4699**
Prep Date:	**7/24/2012**	Analysis Date:	**8/5/2012**	SeqNo:	**132221** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	28	2.5	25.00	0	114	80	120			
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	27	0.10	25.00	0	107	80	120			
Beryllium	29	0.15	25.00	0.01250	117	80	120			
Cadmium	27	0.10	25.00	0	110	80	120			
Chromium	26	0.30	25.00	0	106	80	120			
Cobalt	29	0.30	25.00	0	115	80	120			
Lead	27	0.25	25.00	0	110	80	120			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS-3009** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132221** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	26	0.10	25.00	0.07300	106	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	30	2.5	25.00	0	121	80	120			S
Silver	5.4	0.25	5.000	0	108	80	120			
Vanadium	27	2.5	25.00	0.07050	109	80	120			
Zinc	29	2.5	25.00	0	116	80	120			

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132249** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	12	23.84	0	89.4	75	125			
Beryllium	24	0.75	23.84	0.6761	97.6	75	125			
Cadmium	22	0.50	23.84	0	90.6	75	125			
Chromium	29	1.5	23.84	8.850	84.7	75	125			
Cobalt	26	1.5	23.84	4.445	90.6	75	125			
Lead	23	1.2	23.84	3.311	82.6	75	125			
Nickel	27	2.5	23.84	6.181	86.9	75	125			
Silver	4.0	1.2	4.768	0	83.8	75	125			

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132250** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	12	24.91	0	94.6	75	125	9.99	20	
Beryllium	25	0.75	24.91	0.6761	98.4	75	125	5.04	20	
Cadmium	23	0.50	24.91	0	90.6	75	125	4.33	20	
Chromium	32	1.5	24.91	8.850	94.1	75	125	10.6	20	
Cobalt	27	1.5	24.91	4.445	91.3	75	125	4.29	20	
Lead	25	1.2	24.91	3.311	87.3	75	125	8.61	20	
Nickel	29	2.5	24.91	6.181	91.7	75	125	7.56	20	
Silver	4.4	1.2	4.982	0	88.1	75	125	9.44	20	

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4734**
Prep Date: **7/24/2012** Analysis Date: **8/8/2012** SeqNo: **133485** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	13	12	23.84	0	54.1	75	125			S
Vanadium	43	12	23.84	31.42	47.7	75	125			S

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207900**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4734**
Prep Date: **7/24/2012** Analysis Date: **8/8/2012** SeqNo: **133486** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	14	12	24.91	0	57.7	75	125	10.9	20	S
Vanadium	55	12	24.91	31.42	93.0	75	125	24.2	20	R

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4816**
Prep Date: **7/24/2012** Analysis Date: **8/10/2012** SeqNo: **135933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	23.84	3.961	28.4	75	125			S
Zinc	35	13	23.84	16.80	76.6	75	125			

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4816**
Prep Date: **7/24/2012** Analysis Date: **8/10/2012** SeqNo: **135934** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	24.91	3.961	34.3	75	125	0	20	S
Zinc	39	13	24.91	16.80	90.3	75	125	11.4	20	

Qualifiers:

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1207900**

Received by/date: 07/20/12

Logged By: **Ashley Gallegos** **7/20/2012 7:55:00 AM**

Completed By: **Ashley Gallegos** **7/20/2012 9:45:16 AM**

Reviewed By: 07/20/12

Chain of Custody

1. Were seals intact? Yes ✔ No Not Present
2. Is Chain of Custody complete? Yes ✔ No Not Present
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ✔ No NA
5. Was an attempt made to cool the samples? Yes ✔ No NA
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ✔ No NA
7. Sample(s) in proper container(s)? Yes ✔ No
8. Sufficient sample volume for indicated test(s)? Yes ✔ No
9. Are samples (except VOA and ONG) properly preserved? Yes ✔ No
10. Was preservative added to bottles? Yes ✓ No ~~✔~~ NA
    Added 10mL HNO_3 to -007E for acceptable pH.
11. VOA vials have zero headspace? Yes ✔ No No VOA Vials
12. Were any sample containers received broken? Yes No ✔
13. Does paperwork match bottle labels? Yes ✔ No
    (Note discrepancies on chain of custody)
    # of preserved bottles checked for pH: 2
14. Are matrices correctly identified on Chain of Custody? Yes ✔ No
    (<2 or >12 unless noted)
15. Is it clear what analyses were requested? Yes ✔ No
    Adjusted? yes
16. Were all holding times able to be met? Yes ✔ No
    (If no, notify customer for authorization.)
    Checked by: mg

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

    Person Notified: Date:
    By Whom: Via: eMail Phone Fax In Person
    Regarding:
    Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU NO. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207900	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/18/12	1125	SOIL	SWMU 14-3 (0-0.5')	2 ENCORES	—	-001										X						
				2 VIALS	MeOH	-001										X						
				2 JARS	—	-001										X	X	X	X			
	1200	SOIL	SWMU 14-3 (1.5-2')	2 ENCORES	—	-002										X						
				2 VIALS	MeOH	-002										X						
				2 JARS	—	-002										X	X	X	X			
	1215	SOIL	SWMU 14-3 (8-10)	2 ENCORES	—	-003										X						
				2 VIALS	MeOH	-003										X						
				2 JARS	—	-003										X	X	X	X			
	1230	SOIL	SWMU 14-3 (12-14)	2 ENCORES	—	-004										X						
				2 ~~JARS~~ VIALS	MeOH	-004										X						
				2 ~~ENC~~ JARS	—	-004										X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
7.18.12	1830	TRACY PAYNE		07/20/12	0755	
Date:	Time:	Relinquished by:	Received by:	Date	Time	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM. 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU NO. 14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207700	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/18/12	1245	SOIL	SWMU 14-3 (25.5-26')	2 ENCORES	—	-005										X						
				2 VIALS	MeOH	-005										X						
				2 JARS	—	-005										X	X	X	X			
	1345	SOIL	SWMU 14-1 (48-50')	2 ENCORES	—	-006										X						
				2 VIALS	MeOH	-006										X						
				2 JARS	—	-006										X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
7.19.12	0830	TRACY PAYNE		07/20/12	0755	
Date:	Time:	Relinquished by:	Received by:	Date	Time	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU NO.14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207900	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TPH	METALS			Air Bubbles (Y or N)
7.18.12	1045	WATER	SWMU 14-3 GW	6 VOA	HCL & NEAT	-007										X		X				
↓	↓	↓	↓	1 L AMBER	—	-007											X					
↓	↓	↓	↓	1 PLASTIC	HNO_3	-007													X			
7.18.12	1315	WATER	FB071812	6 VOA	HCL & NEAT	-008										X		X				
↓	↓	↓	↓	1 L AMBER	—	-008											X					
↓	↓	↓	↓	1 PLASTIC	HNO_3	-008													X			
↓	↓	↓	↓	1 PLASTIC	NaOH	-008													X			
7/18/12	—	WATER	TRIP BLANK	1 VOA	HCL	-009										X						
↓	—	MeOH	MEOH BLANK	2 VIALS	MeOH	-010										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
7.19.12	0830	TRACY PAYNE	[signature]	07/20/12	0755
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Analyte	Analytical Method
Antimony	SW-846 method 6010/6020
Arsenic	SW-846 method 6010/6020
Barium	SW-846 method 6010/6020
Beryllium	SW-846 method 6010/6020
Cadmium	SW-846 method 6010/6020
Chromium	SW-846 method 6010/6020
Cobalt	SW-846 method 6010/6020
Cyanide	SW-846 method 335.4/335.2 mod
Lead	SW-846 method 6010/6020
Mercury	SW-846 method 7470/7471
Nickel	SW-846 method 6010/6020
Selenium	SW-846 method 6010/6020
Silver	SW-846 method 6010/6020
Vanadium	SW-846 method 6010/6020
Zinc	SW-846 method 6010/6020
Iron	SW-846 method 6010/6020
Manganese	SW-846 method 6010/6020

Scott T. Crouch P.G.
Senior Consultant - RPS
Cielo Center, 1250 South Capital of Texas Highway, Building Three, Suite 200,
Austin, Texas, 78746 .
USA
Tel: +1 512 347 7588
Fax: +1 512 347 8243
Direct: +1 512 879 6697
Mobile: +1 512 297 3743
Email: CrouchS@rpsgroup.com
www: www.rpsgroup.com

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 22, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.14 OrderNo.: 1207917

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 13 sample(s) on 7/20/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:18:00 PM
Lab ID: 1207917-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	88	9.9		mg/Kg	1	7/23/2012 10:21:31 AM
Motor Oil Range Organics (MRO)	56	50		mg/Kg	1	7/23/2012 10:21:31 AM
Surr: DNOP	111	77.6-140		%REC	1	7/23/2012 10:21:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/25/2012 10:02:17 PM
Surr: BFB	97.8	84-116		%REC	2	7/25/2012 10:02:17 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:58:53 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	2.5		mg/Kg	1	8/9/2012 5:34:54 AM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:54:51 PM
Barium	870	2.0		mg/Kg	20	8/8/2012 10:55:27 AM
Beryllium	0.33	0.15		mg/Kg	1	8/5/2012 7:25:13 PM
Cadmium	ND	0.10		mg/Kg	1	8/5/2012 7:25:13 PM
Chromium	3.4	0.30		mg/Kg	1	8/5/2012 7:25:13 PM
Cobalt	2.5	0.30		mg/Kg	1	8/5/2012 7:25:13 PM
Iron	3200	100		mg/Kg	100	8/8/2012 10:57:55 AM
Lead	ND	0.25		mg/Kg	1	8/5/2012 7:25:13 PM
Manganese	320	2.0		mg/Kg	20	8/8/2012 10:55:27 AM
Nickel	3.1	0.50		mg/Kg	1	8/5/2012 7:25:13 PM
Selenium	ND	2.5		mg/Kg	1	8/5/2012 7:25:13 PM
Silver	ND	0.25		mg/Kg	1	8/5/2012 7:25:13 PM
Vanadium	17	2.5		mg/Kg	1	8/5/2012 7:25:13 PM
Zinc	8.3	2.5		mg/Kg	1	8/5/2012 7:25:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Aniline	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Anthracene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Azobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:18:00 PM
Lab ID: 1207917-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Carbazole	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/25/2012 9:48:10 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Chrysene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/25/2012 9:48:10 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/25/2012 9:48:10 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/25/2012 9:48:10 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/25/2012 9:48:10 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/25/2012 9:48:10 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Fluorene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Isophorone	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Naphthalene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM

Qualifiers:

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:18:00 PM
Lab ID: 1207917-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/25/2012 9:48:10 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/25/2012 9:48:10 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/25/2012 9:48:10 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Phenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Pyrene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Pyridine	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Surr: 2,4,6-Tribromophenol	116	20.1-121		%REC	1	7/25/2012 9:48:10 PM
Surr: 2-Fluorobiphenyl	102	19-133		%REC	1	7/25/2012 9:48:10 PM
Surr: 2-Fluorophenol	101	20.2-108		%REC	1	7/25/2012 9:48:10 PM
Surr: 4-Terphenyl-d14	102	18.9-115		%REC	1	7/25/2012 9:48:10 PM
Surr: Nitrobenzene-d5	106	20.8-123		%REC	1	7/25/2012 9:48:10 PM
Surr: Phenol-d5	98.5	19.8-115		%REC	1	7/25/2012 9:48:10 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Toluene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Ethylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Xylenes, Total	ND	2.81		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Methyl tert-butyl ether (MTBE)	ND	1.87		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2,4-Trimethylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,3,5-Trimethylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dichloroethane (EDC)	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dibromoethane (EDB)	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Naphthalene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1-Methylnaphthalene	ND	3.74		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2-Methylnaphthalene	ND	3.74		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Acetone	ND	28.1		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Bromobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Bromodichloromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Bromoform	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2-Butanone	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Carbon tetrachloride	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Chlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Chloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Chloroform	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:18:00 PM
Lab ID: 1207917-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2-Chlorotoluene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Carbon disulfide	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
4-Chlorotoluene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
cis-1,2-DCE	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
cis-1,3-Dichloropropene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dibromo-3-chloropropane	ND	1.87		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Dibromochloromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Dibromomethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,3-Dichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,4-Dichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Dichlorodifluoromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1-Dichloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1-Dichloroethene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dichloropropane	ND	1.87		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,3-Dichloropropane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2,2-Dichloropropane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1-Dichloropropene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Hexachlorobutadiene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Isopropylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
4-Isopropyltoluene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Methylene chloride	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
n-Butylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2-Hexanone	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
n-Propylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
sec-Butylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Styrene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
4-Methyl-2-pentanone	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
tert-Butylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1,1,2-Tetrachloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1,2,2-Tetrachloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Tetrachloroethene (PCE)	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
trans-1,2-DCE	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
trans-1,3-Dichloropropene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2,3-Trichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2,4-Trichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1,1-Trichloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1,2-Trichloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Trichloroethene (TCE)	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Trichlorofluoromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2,3-Trichloropropane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:18:00 PM
Lab ID: 1207917-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%REC	1	7/26/2012 5:39:45 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	1	7/26/2012 5:39:45 PM
Surr: Dibromofluoromethane	86.2	70-130		%REC	1	7/26/2012 5:39:45 PM
Surr: Toluene-d8	95.3	70-130		%REC	1	7/26/2012 5:39:45 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207917-002 **Matrix:** SOIL

Client Sample ID: SWMU 14-4 (1.5-2.0')
Collection Date: 7/17/2012 1:30:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	39	10		mg/Kg	1	7/23/2012 8:40:31 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/23/2012 8:40:31 AM
Surr: DNOP	112	77.6-140		%REC	1	7/23/2012 8:40:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/25/2012 10:30:55 PM
Surr: BFB	98.8	84-116		%REC	1	7/25/2012 10:30:55 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 11:00:41 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	2.5		mg/Kg	1	8/9/2012 5:37:28 AM
Arsenic	ND	12		mg/Kg	5	8/5/2012 6:05:34 PM
Barium	870	2.0		mg/Kg	20	8/8/2012 11:00:44 AM
Beryllium	0.51	0.15		mg/Kg	1	8/5/2012 7:27:43 PM
Cadmium	ND	0.10		mg/Kg	1	8/5/2012 7:27:43 PM
Chromium	5.2	0.30		mg/Kg	1	8/5/2012 7:27:43 PM
Cobalt	2.7	0.30		mg/Kg	1	8/5/2012 7:27:43 PM
Iron	7500	500		mg/Kg	500	8/8/2012 11:04:52 AM
Lead	0.37	0.25		mg/Kg	1	8/5/2012 7:27:43 PM
Manganese	340	2.0		mg/Kg	20	8/8/2012 11:00:44 AM
Nickel	4.4	0.50		mg/Kg	1	8/5/2012 7:27:43 PM
Selenium	ND	2.5		mg/Kg	1	8/5/2012 7:27:43 PM
Silver	ND	0.25		mg/Kg	1	8/5/2012 7:27:43 PM
Vanadium	13	2.5		mg/Kg	1	8/5/2012 7:27:43 PM
Zinc	10	2.5		mg/Kg	1	8/5/2012 7:27:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Aniline	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Azobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:30:00 PM
Lab ID: 1207917-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Carbazole	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/25/2012 10:18:04 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Chrysene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/25/2012 10:18:04 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/25/2012 10:18:04 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/25/2012 10:18:04 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/25/2012 10:18:04 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/25/2012 10:18:04 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Fluorene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Isophorone	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Naphthalene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:30:00 PM
Lab ID: 1207917-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/25/2012 10:18:04 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/25/2012 10:18:04 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/25/2012 10:18:04 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Phenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Pyridine	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Surr: 2,4,6-Tribromophenol	55.9	20.1-121		%REC	1	7/25/2012 10:18:04 PM
Surr: 2-Fluorobiphenyl	49.0	19-133		%REC	1	7/25/2012 10:18:04 PM
Surr: 2-Fluorophenol	44.4	20.2-108		%REC	1	7/25/2012 10:18:04 PM
Surr: 4-Terphenyl-d14	56.4	18.9-115		%REC	1	7/25/2012 10:18:04 PM
Surr: Nitrobenzene-d5	49.5	20.8-123		%REC	1	7/25/2012 10:18:04 PM
Surr: Phenol-d5	45.2	19.8-115		%REC	1	7/25/2012 10:18:04 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Toluene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Ethylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Xylenes, Total	ND	2.52		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Methyl tert-butyl ether (MTBE)	ND	1.68		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2,4-Trimethylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,3,5-Trimethylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dichloroethane (EDC)	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dibromoethane (EDB)	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Naphthalene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1-Methylnaphthalene	ND	3.36		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2-Methylnaphthalene	ND	3.36		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Acetone	ND	25.2		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Bromobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Bromodichloromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Bromoform	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2-Butanone	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Carbon tetrachloride	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Chlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Chloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Chloroform	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:30:00 PM
Lab ID: 1207917-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2-Chlorotoluene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Carbon disulfide	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
4-Chlorotoluene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
cis-1,2-DCE	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
cis-1,3-Dichloropropene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dibromo-3-chloropropane	ND	1.68		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Dibromochloromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Dibromomethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,3-Dichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,4-Dichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Dichlorodifluoromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1-Dichloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1-Dichloroethene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dichloropropane	ND	1.68		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,3-Dichloropropane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2,2-Dichloropropane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1-Dichloropropene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Hexachlorobutadiene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Isopropylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
4-Isopropyltoluene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Methylene chloride	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
n-Butylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2-Hexanone	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
n-Propylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
sec-Butylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Styrene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
4-Methyl-2-pentanone	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
tert-Butylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1,1,2-Tetrachloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1,2,2-Tetrachloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Tetrachloroethene (PCE)	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
trans-1,2-DCE	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
trans-1,3-Dichloropropene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2,3-Trichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2,4-Trichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1,1-Trichloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1,2-Trichloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Trichloroethene (TCE)	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Trichlorofluoromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2,3-Trichloropropane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/17/2012 1:30:00 PM
Lab ID: 1207917-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Surr: 1,2-Dichloroethane-d4	181	70-130	S	%REC	1	7/26/2012 6:07:20 PM
Surr: 4-Bromofluorobenzene	89.1	70-130		%REC	1	7/26/2012 6:07:20 PM
Surr: Dibromofluoromethane	83.0	70-130		%REC	1	7/26/2012 6:07:20 PM
Surr: Toluene-d8	98.4	70-130		%REC	1	7/26/2012 6:07:20 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (10-12')
Project: SWMU NO.14
Collection Date: 7/17/2012 2:00:00 PM
Lab ID: 1207917-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	610	100		mg/Kg	10	7/22/2012 7:01:02 PM
Motor Oil Range Organics (MRO)	ND	510		mg/Kg	10	7/22/2012 7:01:02 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/22/2012 7:01:02 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	67	50		mg/Kg	10	7/25/2012 10:59:42 PM
Surr: BFB	165	84-116	S	%REC	10	7/25/2012 10:59:42 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 11:02:31 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 6:07:55 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 6:07:55 PM
Barium	460	2.0		mg/Kg	20	8/8/2012 11:18:39 AM
Beryllium	0.86	0.75		mg/Kg	5	8/5/2012 6:07:55 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 6:07:55 PM
Chromium	12	1.5		mg/Kg	5	8/5/2012 6:07:55 PM
Cobalt	5.0	1.5		mg/Kg	5	8/5/2012 6:07:55 PM
Iron	16000	500		mg/Kg	500	8/8/2012 11:21:06 AM
Lead	2.4	1.2		mg/Kg	5	8/5/2012 6:07:55 PM
Manganese	720	2.0		mg/Kg	20	8/8/2012 11:18:39 AM
Nickel	8.6	2.5		mg/Kg	5	8/5/2012 6:07:55 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 6:07:55 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 6:07:55 PM
Vanadium	25	12		mg/Kg	5	8/5/2012 6:07:55 PM
Zinc	22	12		mg/Kg	5	8/10/2012 5:27:11 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	1.0	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Aniline	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Azobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (10-12')
Project: SWMU NO.14
Collection Date: 7/17/2012 2:00:00 PM
Lab ID: 1207917-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Carbazole	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/25/2012 10:47:54 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Chrysene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/25/2012 10:47:54 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/25/2012 10:47:54 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/25/2012 10:47:54 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/25/2012 10:47:54 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/25/2012 10:47:54 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Fluorene	1.4	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Isophorone	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
1-Methylnaphthalene	29	4.0		mg/Kg	10	7/26/2012 11:34:14 AM
2-Methylnaphthalene	46	4.0		mg/Kg	10	7/26/2012 11:34:14 AM
2-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Naphthalene	4.0	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (10-12')
Project: SWMU NO.14
Collection Date: 7/17/2012 2:00:00 PM
Lab ID: 1207917-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/25/2012 10:47:54 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/25/2012 10:47:54 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/25/2012 10:47:54 PM
Phenanthrene	3.3	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Phenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Pyridine	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Surr: 2,4,6-Tribromophenol	78.0	20.1-121		%REC	1	7/25/2012 10:47:54 PM
Surr: 2-Fluorobiphenyl	90.5	19-133		%REC	1	7/25/2012 10:47:54 PM
Surr: 2-Fluorophenol	101	20.2-108		%REC	1	7/25/2012 10:47:54 PM
Surr: 4-Terphenyl-d14	105	18.9-115		%REC	1	7/25/2012 10:47:54 PM
Surr: Nitrobenzene-d5	99.3	20.8-123		%REC	1	7/25/2012 10:47:54 PM
Surr: Phenol-d5	108	19.8-115		%REC	1	7/25/2012 10:47:54 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Ethylbenzene	1.4	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2,4-Trimethylbenzene	7.8	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,3,5-Trimethylbenzene	1.7	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Naphthalene	9.2	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1-Methylnaphthalene	45	4.0		mg/Kg	20	7/23/2012 4:03:36 PM
2-Methylnaphthalene	90	20		mg/Kg	100	7/24/2012 11:40:15 AM
Acetone	ND	15		mg/Kg	20	7/23/2012 4:03:36 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 4:03:36 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 4:03:36 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 4:03:36 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (10-12')
Project: SWMU NO.14
Collection Date: 7/17/2012 2:00:00 PM
Lab ID: 1207917-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 4:03:36 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 4:03:36 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 4:03:36 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 4:03:36 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (10-12')
Project: SWMU NO.14
Collection Date: 7/17/2012 2:00:00 PM
Lab ID: 1207917-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	20	7/23/2012 4:03:36 PM
Surr: 4-Bromofluorobenzene	75.4	70-130		%REC	20	7/23/2012 4:03:36 PM
Surr: Dibromofluoromethane	103	70-130		%REC	20	7/23/2012 4:03:36 PM
Surr: Toluene-d8	104	70-130		%REC	20	7/23/2012 4:03:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207917-004 **Matrix:** SOIL

Client Sample ID: SWMU 14-4 (19.5-20')
Collection Date: 7/17/2012 2:15:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2012 5:10:45 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/22/2012 5:10:45 PM
Surr: DNOP	113	77.6-140		%REC	1	7/22/2012 5:10:45 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/25/2012 11:28:30 PM
Surr: BFB	103	84-116		%REC	1	7/25/2012 11:28:30 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 3:47:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 6:10:19 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 6:10:19 PM
Barium	480	5.0		mg/Kg	50	8/8/2012 11:23:48 AM
Beryllium	1.3	0.75		mg/Kg	5	8/5/2012 6:10:19 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 6:10:19 PM
Chromium	22	1.5		mg/Kg	5	8/5/2012 6:10:19 PM
Cobalt	8.0	1.5		mg/Kg	5	8/5/2012 6:10:19 PM
Iron	23000	500		mg/Kg	500	8/8/2012 11:26:15 AM
Lead	1.4	1.2		mg/Kg	5	8/5/2012 6:10:19 PM
Manganese	1000	5.0		mg/Kg	50	8/8/2012 11:23:48 AM
Nickel	17	2.5		mg/Kg	5	8/5/2012 6:10:19 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 6:10:19 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 6:10:19 PM
Vanadium	15	12		mg/Kg	5	8/5/2012 6:10:19 PM
Zinc	25	12		mg/Kg	5	8/10/2012 5:31:16 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Aniline	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Azobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207917-004 **Matrix:** SOIL

Client Sample ID: SWMU 14-4 (19.5-20')
Collection Date: 7/17/2012 2:15:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Carbazole	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/26/2012 8:04:37 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Chrysene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/26/2012 8:04:37 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/26/2012 8:04:37 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/26/2012 8:04:37 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/26/2012 8:04:37 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/26/2012 8:04:37 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Fluorene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Isophorone	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Naphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (19.5-20')
Project: SWMU NO.14
Collection Date: 7/17/2012 2:15:00 PM
Lab ID: 1207917-004 **Matrix:** SOIL **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/26/2012 8:04:37 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/26/2012 8:04:37 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/26/2012 8:04:37 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Phenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Pyridine	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Surr: 2,4,6-Tribromophenol	79.7	20.1-121		%REC	1	7/26/2012 8:04:37 PM
Surr: 2-Fluorobiphenyl	69.3	19-133		%REC	1	7/26/2012 8:04:37 PM
Surr: 2-Fluorophenol	63.5	20.2-108		%REC	1	7/26/2012 8:04:37 PM
Surr: 4-Terphenyl-d14	71.5	18.9-115		%REC	1	7/26/2012 8:04:37 PM
Surr: Nitrobenzene-d5	68.2	20.8-123		%REC	1	7/26/2012 8:04:37 PM
Surr: Phenol-d5	62.0	19.8-115		%REC	1	7/26/2012 8:04:37 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Toluene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Ethylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Xylenes, Total	ND	2.78		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Methyl tert-butyl ether (MTBE)	ND	1.85		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2,4-Trimethylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,3,5-Trimethylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dichloroethane (EDC)	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dibromoethane (EDB)	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Naphthalene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1-Methylnaphthalene	ND	3.70		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2-Methylnaphthalene	ND	3.70		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Acetone	ND	27.8		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Bromobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Bromodichloromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Bromoform	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2-Butanone	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Carbon tetrachloride	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Chlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Chloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Chloroform	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (19.5-20')
Project: SWMU NO.14
Collection Date: 7/17/2012 2:15:00 PM
Lab ID: 1207917-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2-Chlorotoluene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Carbon disulfide	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
4-Chlorotoluene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
cis-1,2-DCE	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
cis-1,3-Dichloropropene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dibromo-3-chloropropane	ND	1.85		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Dibromochloromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Dibromomethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,3-Dichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,4-Dichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Dichlorodifluoromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1-Dichloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1-Dichloroethene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dichloropropane	ND	1.85		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,3-Dichloropropane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2,2-Dichloropropane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1-Dichloropropene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Hexachlorobutadiene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Isopropylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
4-Isopropyltoluene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Methylene chloride	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
n-Butylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2-Hexanone	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
n-Propylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
sec-Butylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Styrene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
4-Methyl-2-pentanone	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
tert-Butylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1,1,2-Tetrachloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1,2,2-Tetrachloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Tetrachloroethene (PCE)	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
trans-1,2-DCE	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
trans-1,3-Dichloropropene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2,3-Trichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2,4-Trichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1,1-Trichloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1,2-Trichloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Trichloroethene (TCE)	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Trichlorofluoromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2,3-Trichloropropane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-4 (19.5-20')
Project: SWMU NO.14
Collection Date: 7/17/2012 2:15:00 PM
Lab ID: 1207917-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%REC	1	7/26/2012 6:34:57 PM
Surr: 4-Bromofluorobenzene	91.3	70-130		%REC	1	7/26/2012 6:34:57 PM
Surr: Dibromofluoromethane	91.2	70-130		%REC	1	7/26/2012 6:34:57 PM
Surr: Toluene-d8	94.2	70-130		%REC	1	7/26/2012 6:34:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:10:00 PM
Lab ID: 1207917-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	53	9.9		mg/Kg	1	7/23/2012 9:05:34 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/23/2012 9:05:34 AM
Surr: DNOP	111	77.6-140		%REC	1	7/23/2012 9:05:34 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/25/2012 11:57:16 PM
Surr: BFB	101	84-116		%REC	2	7/25/2012 11:57:16 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 3:48:57 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 5:33:46 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 6:12:43 PM
Barium	700	2.0		mg/Kg	20	8/8/2012 11:28:59 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 6:12:43 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 6:12:43 PM
Chromium	8.8	1.5		mg/Kg	5	8/5/2012 6:12:43 PM
Cobalt	4.4	1.5		mg/Kg	5	8/5/2012 6:12:43 PM
Iron	14000	500		mg/Kg	500	8/8/2012 11:31:24 AM
Lead	3.3	1.2		mg/Kg	5	8/5/2012 6:12:43 PM
Manganese	510	2.0		mg/Kg	20	8/8/2012 11:28:59 AM
Nickel	6.2	2.5		mg/Kg	5	8/5/2012 6:12:43 PM
Selenium	ND	12		mg/Kg	5	8/8/2012 11:55:49 AM
Silver	ND	1.2		mg/Kg	5	8/5/2012 6:12:43 PM
Vanadium	31	12		mg/Kg	5	8/8/2012 11:55:49 AM
Zinc	17	13		mg/Kg	5	8/10/2012 5:33:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Aniline	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Azobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:10:00 PM
Lab ID: 1207917-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Carbazole	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/26/2012 8:34:24 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Chrysene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/26/2012 8:34:24 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/26/2012 8:34:24 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/26/2012 8:34:24 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/26/2012 8:34:24 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/26/2012 8:34:24 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Fluorene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Isophorone	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Naphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:10:00 PM
Lab ID: 1207917-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/26/2012 8:34:24 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/26/2012 8:34:24 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/26/2012 8:34:24 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Phenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Pyridine	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Surr: 2,4,6-Tribromophenol	95.3	20.1-121		%REC	1	7/26/2012 8:34:24 PM
Surr: 2-Fluorobiphenyl	86.2	19-133		%REC	1	7/26/2012 8:34:24 PM
Surr: 2-Fluorophenol	68.8	20.2-108		%REC	1	7/26/2012 8:34:24 PM
Surr: 4-Terphenyl-d14	87.7	18.9-115		%REC	1	7/26/2012 8:34:24 PM
Surr: Nitrobenzene-d5	79.1	20.8-123		%REC	1	7/26/2012 8:34:24 PM
Surr: Phenol-d5	74.2	19.8-115		%REC	1	7/26/2012 8:34:24 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Toluene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Naphthalene	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/21/2012 5:04:07 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/21/2012 5:04:07 PM
Acetone	ND	0.75		mg/Kg	1	7/21/2012 5:04:07 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Bromoform	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Bromomethane	ND	0.15		mg/Kg	1	7/21/2012 5:04:07 PM
2-Butanone	ND	0.50		mg/Kg	1	7/21/2012 5:04:07 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/21/2012 5:04:07 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Chloroethane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:10:00 PM
Lab ID: 1207917-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Chloromethane	ND	0.15		mg/Kg	1	7/21/2012 5:04:07 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/21/2012 5:04:07 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/21/2012 5:04:07 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/21/2012 5:04:07 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Styrene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:10:00 PM
Lab ID: 1207917-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	7/21/2012 5:04:07 PM
Surr: 4-Bromofluorobenzene	87.2	70-130		%REC	1	7/21/2012 5:04:07 PM
Surr: Dibromofluoromethane	91.3	70-130		%REC	1	7/21/2012 5:04:07 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	7/21/2012 5:04:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:24:00 PM
Lab ID: 1207917-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	6200	200		mg/Kg	20	7/23/2012 8:24:32 AM
Motor Oil Range Organics (MRO)	ND	980		mg/Kg	20	7/23/2012 8:24:32 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 8:24:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/26/2012 12:25:59 AM
Surr: BFB	104	84-116		%REC	50	7/26/2012 12:25:59 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 3:50:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 5:43:48 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 5:43:48 PM
Barium	470	5.0		mg/Kg	50	8/10/2012 6:04:10 PM
Beryllium	0.76	0.75		mg/Kg	5	8/10/2012 5:43:48 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 5:43:48 PM
Chromium	12	1.5		mg/Kg	5	8/10/2012 5:43:48 PM
Cobalt	3.8	1.5		mg/Kg	5	8/10/2012 5:43:48 PM
Iron	11000	500		mg/Kg	500	8/10/2012 6:06:36 PM
Lead	4.4	1.3		mg/Kg	5	8/10/2012 5:43:48 PM
Manganese	530	5.0		mg/Kg	50	8/10/2012 6:04:10 PM
Nickel	7.3	2.5		mg/Kg	5	8/10/2012 5:43:48 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 5:43:48 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 5:43:48 PM
Vanadium	21	13		mg/Kg	5	8/10/2012 5:43:48 PM
Zinc	35	13		mg/Kg	5	8/10/2012 5:43:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Aniline	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Azobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:24:00 PM
Lab ID: 1207917-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Carbazole	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/26/2012 9:04:09 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Chrysene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/26/2012 9:04:09 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/26/2012 9:04:09 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/26/2012 9:04:09 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Fluorene	1.8	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Isophorone	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
1-Methylnaphthalene	5.9	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2-Methylnaphthalene	6.4	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Naphthalene	1.0	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:24:00 PM
Lab ID: 1207917-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/26/2012 9:04:09 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/26/2012 9:04:09 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/26/2012 9:04:09 PM
Phenanthrene	3.2	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Phenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Pyridine	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Surr: 2,4,6-Tribromophenol	98.5	20.1-121		%REC	1	7/26/2012 9:04:09 PM
Surr: 2-Fluorobiphenyl	87.9	19-133		%REC	1	7/26/2012 9:04:09 PM
Surr: 2-Fluorophenol	99.2	20.2-108		%REC	1	7/26/2012 9:04:09 PM
Surr: 4-Terphenyl-d14	93.9	18.9-115		%REC	1	7/26/2012 9:04:09 PM
Surr: Nitrobenzene-d5	111	20.8-123		%REC	1	7/26/2012 9:04:09 PM
Surr: Phenol-d5	96.0	19.8-115		%REC	1	7/26/2012 9:04:09 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Ethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2,4-Trimethylbenzene	1.8	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,3,5-Trimethylbenzene	1.1	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Naphthalene	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1-Methylnaphthalene	4.7	4.0		mg/Kg	20	7/23/2012 5:28:47 PM
2-Methylnaphthalene	5.6	4.0		mg/Kg	20	7/23/2012 5:28:47 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 5:28:47 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 5:28:47 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 5:28:47 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 5:28:47 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:24:00 PM
Lab ID: 1207917-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 5:28:47 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 5:28:47 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 5:28:47 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 5:28:47 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM

Qualifiers:

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%REC	20	7/23/2012 5:28:47 PM
Surr: 4-Bromofluorobenzene	72.3	70-130		%REC	20	7/23/2012 5:28:47 PM
Surr: Dibromofluoromethane	108	70-130		%REC	20	7/23/2012 5:28:47 PM
Surr: Toluene-d8	100	70-130		%REC	20	7/23/2012 5:28:47 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (8-10')
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Collection Date: 7/17/2012 4:45:00 PM
Lab ID: 1207917-007
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	3300	190		mg/Kg	20	7/23/2012 11:19:26 AM
Motor Oil Range Organics (MRO)	ND	970		mg/Kg	20	7/23/2012 11:19:26 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 11:19:26 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/26/2012 12:54:47 AM
Surr: BFB	106	84-116		%REC	50	7/26/2012 12:54:47 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.29	0.033		mg/Kg	1	8/3/2012 3:52:30 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
Arsenic	ND	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
Barium	400	5.0		mg/Kg	50	8/10/2012 6:11:40 PM
Beryllium	0.58	0.15		mg/Kg	1	8/10/2012 8:35:35 PM
Cadmium	ND	0.10		mg/Kg	1	8/10/2012 8:35:35 PM
Chromium	76	1.5		mg/Kg	5	8/10/2012 6:09:14 PM
Cobalt	3.7	0.30		mg/Kg	1	8/10/2012 8:35:35 PM
Iron	14000	500		mg/Kg	500	8/10/2012 6:14:05 PM
Lead	4.6	0.25		mg/Kg	1	8/10/2012 8:35:35 PM
Manganese	400	5.0		mg/Kg	50	8/10/2012 6:11:40 PM
Nickel	6.6	0.50		mg/Kg	1	8/10/2012 8:35:35 PM
Selenium	ND	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
Silver	ND	0.25		mg/Kg	1	8/10/2012 8:35:35 PM
Vanadium	20	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
Zinc	37	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Aniline	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Azobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (8-10')
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Collection Date: 7/17/2012 4:45:00 PM
Lab ID: 1207917-007
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Carbazole	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/26/2012 9:33:54 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Chrysene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/26/2012 9:33:54 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/26/2012 9:33:54 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/26/2012 9:33:54 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Fluorene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Isophorone	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
1-Methylnaphthalene	16	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2-Methylnaphthalene	16	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Naphthalene	2.5	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Project: SWMU NO.14
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Matrix: SOIL
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/26/2012 9:33:54 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/26/2012 9:33:54 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/26/2012 9:33:54 PM
Phenanthrene	3.0	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Phenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Pyridine	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Surr: 2,4,6-Tribromophenol	79.6	20.1-121		%REC	1	7/26/2012 9:33:54 PM
Surr: 2-Fluorobiphenyl	93.4	19-133		%REC	1	7/26/2012 9:33:54 PM
Surr: 2-Fluorophenol	91.3	20.2-108		%REC	1	7/26/2012 9:33:54 PM
Surr: 4-Terphenyl-d14	101	18.9-115		%REC	1	7/26/2012 9:33:54 PM
Surr: Nitrobenzene-d5	103	20.8-123		%REC	1	7/26/2012 9:33:54 PM
Surr: Phenol-d5	85.4	19.8-115		%REC	1	7/26/2012 9:33:54 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Ethylbenzene	1.1	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2,4-Trimethylbenzene	6.2	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Naphthalene	3.0	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1-Methylnaphthalene	16	4.0		mg/Kg	20	7/23/2012 6:25:15 PM
2-Methylnaphthalene	17	4.0		mg/Kg	20	7/23/2012 6:25:15 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 6:25:15 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 6:25:15 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 6:25:15 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 6:25:15 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM

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Chloroform	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 6:25:15 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 6:25:15 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 6:25:15 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 6:25:15 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (8-10')
Project: SWMU NO.14
Collection Date: 7/17/2012 4:45:00 PM
Lab ID: 1207917-007
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%REC	20	7/23/2012 6:25:15 PM
Surr: 4-Bromofluorobenzene	86.1	70-130		%REC	20	7/23/2012 6:25:15 PM
Surr: Dibromofluoromethane	110	70-130		%REC	20	7/23/2012 6:25:15 PM
Surr: Toluene-d8	101	70-130		%REC	20	7/23/2012 6:25:15 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (8-10') Dup
Project: SWMU NO.14
Collection Date: 7/17/2012 4:45:00 PM
Lab ID: 1207917-008 **Matrix:** SOIL **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	11000	510		mg/Kg	50	7/23/2012 1:31:08 PM
Motor Oil Range Organics (MRO)	ND	2600		mg/Kg	50	7/23/2012 1:31:08 PM
Surr: DNOP	0	77.6-140	S	%REC	50	7/23/2012 1:31:08 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	500		mg/Kg	100	7/26/2012 1:23:27 AM
Surr: BFB	102	84-116		%REC	100	7/26/2012 1:23:27 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	1.5	0.16		mg/Kg	5	8/3/2012 4:06:38 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	2.5		mg/Kg	1	8/10/2012 8:38:21 PM
Arsenic	ND	2.5		mg/Kg	1	8/10/2012 8:38:21 PM
Barium	400	5.0		mg/Kg	50	8/10/2012 6:19:10 PM
Beryllium	0.70	0.15		mg/Kg	1	8/10/2012 8:38:21 PM
Cadmium	ND	0.10		mg/Kg	1	8/10/2012 8:38:21 PM
Chromium	97	1.5		mg/Kg	5	8/10/2012 6:16:43 PM
Cobalt	4.2	0.30		mg/Kg	1	8/10/2012 8:38:21 PM
Iron	16000	500		mg/Kg	500	8/10/2012 6:21:37 PM
Lead	5.7	0.25		mg/Kg	1	8/10/2012 8:38:21 PM
Manganese	330	5.0		mg/Kg	50	8/10/2012 6:19:10 PM
Nickel	7.5	0.50		mg/Kg	1	8/10/2012 8:38:21 PM
Selenium	ND	2.5		mg/Kg	1	8/10/2012 8:38:21 PM
Silver	ND	0.25		mg/Kg	1	8/10/2012 8:38:21 PM
Vanadium	23	2.5		mg/Kg	1	8/10/2012 8:38:21 PM
Zinc	64	12		mg/Kg	5	8/10/2012 6:16:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207917-008 **Matrix:** SOIL

Client Sample ID: SWMU 14-2 (8-10') Dup
Collection Date: 7/17/2012 4:45:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 8:24:10 AM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 8:24:10 AM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 8:24:10 AM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 8:24:10 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
1-Methylnaphthalene	19	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2-Methylnaphthalene	20	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Naphthalene	3.1	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (8-10') Dup
Project: SWMU NO.14
Collection Date: 7/17/2012 4:45:00 PM
Lab ID: 1207917-008 **Matrix:** SOIL **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 8:24:10 AM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 8:24:10 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 8:24:10 AM
Phenanthrene	3.3	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Surr: 2,4,6-Tribromophenol	71.8	20.1-121		%REC	1	7/27/2012 8:24:10 AM
Surr: 2-Fluorobiphenyl	81.5	19-133		%REC	1	7/27/2012 8:24:10 AM
Surr: 2-Fluorophenol	94.0	20.2-108		%REC	1	7/27/2012 8:24:10 AM
Surr: 4-Terphenyl-d14	99.6	18.9-115		%REC	1	7/27/2012 8:24:10 AM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/27/2012 8:24:10 AM
Surr: Phenol-d5	92.1	19.8-115		%REC	1	7/27/2012 8:24:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Ethylbenzene	1.0	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2,4-Trimethylbenzene	5.4	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Naphthalene	2.9	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1-Methylnaphthalene	15	4.0		mg/Kg	20	7/23/2012 7:21:44 PM
2-Methylnaphthalene	17	4.0		mg/Kg	20	7/23/2012 7:21:44 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 7:21:44 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 7:21:44 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 7:21:44 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 7:21:44 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (8-10') Dup
Project: SWMU NO.14
Collection Date: 7/17/2012 4:45:00 PM
Lab ID: 1207917-008
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 7:21:44 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 7:21:44 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 7:21:44 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 7:21:44 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (8-10') Dup
Project: SWMU NO.14
Collection Date: 7/17/2012 4:45:00 PM
Lab ID: 1207917-008
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%REC	20	7/23/2012 7:21:44 PM
Surr: 4-Bromofluorobenzene	83.4	70-130		%REC	20	7/23/2012 7:21:44 PM
Surr: Dibromofluoromethane	101	70-130		%REC	20	7/23/2012 7:21:44 PM
Surr: Toluene-d8	103	70-130		%REC	20	7/23/2012 7:21:44 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (16-18')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:10:00 PM
Lab ID: 1207917-009
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	34	9.6		mg/Kg	1	7/23/2012 9:30:58 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/23/2012 9:30:58 AM
Surr: DNOP	109	77.6-140		%REC	1	7/23/2012 9:30:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/26/2012 1:52:09 AM
Surr: BFB	98.9	84-116		%REC	1	7/26/2012 1:52:09 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 3:57:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 6:32:52 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 6:32:52 PM
Barium	520	5.0		mg/Kg	50	8/10/2012 6:36:56 PM
Beryllium	1.3	0.75		mg/Kg	5	8/10/2012 6:32:52 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 6:32:52 PM
Chromium	18	1.5		mg/Kg	5	8/10/2012 6:32:52 PM
Cobalt	7.2	1.5		mg/Kg	5	8/10/2012 6:32:52 PM
Iron	26000	1000		mg/Kg	1000	8/15/2012 7:08:47 AM
Lead	ND	1.3		mg/Kg	5	8/10/2012 6:32:52 PM
Manganese	1100	5.0		mg/Kg	50	8/10/2012 6:36:56 PM
Nickel	16	2.5		mg/Kg	5	8/10/2012 6:32:52 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 6:32:52 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 6:32:52 PM
Vanadium	22	13		mg/Kg	5	8/10/2012 6:32:52 PM
Zinc	26	13		mg/Kg	5	8/10/2012 6:32:52 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Acenaphthylene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Aniline	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Anthracene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Azobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzoic acid	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (16-18')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:10:00 PM
Lab ID: 1207917-009
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Carbazole	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/27/2012 8:53:35 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Chrysene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/27/2012 8:53:35 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Dibenzofuran	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/27/2012 8:53:35 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 8:53:35 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/27/2012 8:53:35 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/27/2012 8:53:35 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
Fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Fluorene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Hexachloroethane	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Isophorone	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2-Methylphenol	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Naphthalene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (16-18')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:10:00 PM
Lab ID: 1207917-009
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 8:53:35 AM
Nitrobenzene	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/27/2012 8:53:35 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/27/2012 8:53:35 AM
Phenanthrene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Phenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Pyrene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Pyridine	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Surr: 2,4,6-Tribromophenol	101	20.1-121		%REC	1	7/27/2012 8:53:35 AM
Surr: 2-Fluorobiphenyl	79.0	19-133		%REC	1	7/27/2012 8:53:35 AM
Surr: 2-Fluorophenol	79.7	20.2-108		%REC	1	7/27/2012 8:53:35 AM
Surr: 4-Terphenyl-d14	78.9	18.9-115		%REC	1	7/27/2012 8:53:35 AM
Surr: Nitrobenzene-d5	78.7	20.8-123		%REC	1	7/27/2012 8:53:35 AM
Surr: Phenol-d5	88.5	19.8-115		%REC	1	7/27/2012 8:53:35 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Toluene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Ethylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Xylenes, Total	ND	3.08		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Methyl tert-butyl ether (MTBE)	ND	2.05		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2,4-Trimethylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,3,5-Trimethylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dichloroethane (EDC)	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dibromoethane (EDB)	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Naphthalene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1-Methylnaphthalene	ND	4.11		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2-Methylnaphthalene	ND	4.11		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Acetone	ND	30.8		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Bromobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Bromodichloromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Bromoform	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2-Butanone	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Carbon tetrachloride	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Chlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Chloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Chloroform	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (16-18')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:10:00 PM
Lab ID: 1207917-009
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2-Chlorotoluene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Carbon disulfide	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
4-Chlorotoluene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
cis-1,2-DCE	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
cis-1,3-Dichloropropene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dibromo-3-chloropropane	ND	2.05		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Dibromochloromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Dibromomethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,3-Dichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,4-Dichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Dichlorodifluoromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1-Dichloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1-Dichloroethene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dichloropropane	ND	2.05		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,3-Dichloropropane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2,2-Dichloropropane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1-Dichloropropene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Hexachlorobutadiene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Isopropylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
4-Isopropyltoluene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Methylene chloride	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
n-Butylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2-Hexanone	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
n-Propylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
sec-Butylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Styrene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
4-Methyl-2-pentanone	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
tert-Butylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1,1,2-Tetrachloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1,2,2-Tetrachloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Tetrachloroethene (PCE)	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
trans-1,2-DCE	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
trans-1,3-Dichloropropene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2,3-Trichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2,4-Trichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1,1-Trichloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1,2-Trichloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Trichloroethene (TCE)	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Trichlorofluoromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2,3-Trichloropropane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (16-18')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:10:00 PM
Lab ID: 1207917-009
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Surr: 1,2-Dichloroethane-d4	132	70-130	S	%REC	1	7/26/2012 7:02:39 PM
Surr: 4-Bromofluorobenzene	86.5	70-130		%REC	1	7/26/2012 7:02:39 PM
Surr: Dibromofluoromethane	66.9	70-130	S	%REC	1	7/26/2012 7:02:39 PM
Surr: Toluene-d8	91.0	70-130		%REC	1	7/26/2012 7:02:39 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (24-25')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:30:00 PM
Lab ID: 1207917-010
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2012 5:32:53 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/22/2012 5:32:53 PM
Surr: DNOP	112	77.6-140		%REC	1	7/22/2012 5:32:53 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/26/2012 2:20:49 AM
Surr: BFB	99.9	84-116		%REC	1	7/26/2012 2:20:49 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:08:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 6:41:43 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 6:41:43 PM
Barium	460	5.0		mg/Kg	50	8/10/2012 6:44:11 PM
Beryllium	1.1	0.75		mg/Kg	5	8/10/2012 6:41:43 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 6:41:43 PM
Chromium	18	1.5		mg/Kg	5	8/10/2012 6:41:43 PM
Cobalt	9.7	1.5		mg/Kg	5	8/10/2012 6:41:43 PM
Iron	19000	500		mg/Kg	500	8/10/2012 6:46:36 PM
Lead	ND	1.3		mg/Kg	5	8/10/2012 6:41:43 PM
Manganese	980	5.0		mg/Kg	50	8/10/2012 6:44:11 PM
Nickel	17	2.5		mg/Kg	5	8/10/2012 6:41:43 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 6:41:43 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 6:41:43 PM
Vanadium	52	13		mg/Kg	5	8/10/2012 6:41:43 PM
Zinc	31	13		mg/Kg	5	8/10/2012 6:41:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Acenaphthylene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Aniline	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Anthracene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Azobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzoic acid	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (24-25')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:30:00 PM
Lab ID: 1207917-010
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Carbazole	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/27/2012 9:23:05 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Chrysene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/27/2012 9:23:05 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Dibenzofuran	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/27/2012 9:23:05 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 9:23:05 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/27/2012 9:23:05 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/27/2012 9:23:05 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
Fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Fluorene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Hexachloroethane	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Isophorone	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2-Methylphenol	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Naphthalene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (24-25')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:30:00 PM
Lab ID: 1207917-010
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 9:23:05 AM
Nitrobenzene	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/27/2012 9:23:05 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/27/2012 9:23:05 AM
Phenanthrene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Phenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Pyrene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Pyridine	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Surr: 2,4,6-Tribromophenol	93.3	20.1-121		%REC	1	7/27/2012 9:23:05 AM
Surr: 2-Fluorobiphenyl	89.4	19-133		%REC	1	7/27/2012 9:23:05 AM
Surr: 2-Fluorophenol	81.6	20.2-108		%REC	1	7/27/2012 9:23:05 AM
Surr: 4-Terphenyl-d14	81.1	18.9-115		%REC	1	7/27/2012 9:23:05 AM
Surr: Nitrobenzene-d5	89.6	20.8-123		%REC	1	7/27/2012 9:23:05 AM
Surr: Phenol-d5	89.1	19.8-115		%REC	1	7/27/2012 9:23:05 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Toluene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Ethylbenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Xylenes, Total	ND	2.97		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Methyl tert-butyl ether (MTBE)	ND	1.98		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2,4-Trimethylbenzene	11.0	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,3,5-Trimethylbenzene	1.12	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dichloroethane (EDC)	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dibromoethane (EDB)	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Naphthalene	3.34	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1-Methylnaphthalene	25.0	3.95		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2-Methylnaphthalene	19.7	3.95		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Acetone	ND	29.7		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Bromobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Bromodichloromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Bromoform	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2-Butanone	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Carbon tetrachloride	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Chlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Chloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Chloroform	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (24-25')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:30:00 PM
Lab ID: 1207917-010
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2-Chlorotoluene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Carbon disulfide	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
4-Chlorotoluene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
cis-1,2-DCE	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
cis-1,3-Dichloropropene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dibromo-3-chloropropane	ND	1.98		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Dibromochloromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Dibromomethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,3-Dichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,4-Dichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Dichlorodifluoromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1-Dichloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1-Dichloroethene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dichloropropane	ND	1.98		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,3-Dichloropropane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2,2-Dichloropropane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1-Dichloropropene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Hexachlorobutadiene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Isopropylbenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
4-Isopropyltoluene	1.12	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Methylene chloride	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
n-Butylbenzene	1.68	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2-Hexanone	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
n-Propylbenzene	2.03	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
sec-Butylbenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Styrene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
4-Methyl-2-pentanone	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
tert-Butylbenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1,1,2-Tetrachloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1,2,2-Tetrachloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Tetrachloroethene (PCE)	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
trans-1,2-DCE	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
trans-1,3-Dichloropropene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2,3-Trichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2,4-Trichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1,1-Trichloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1,2-Trichloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Trichloroethene (TCE)	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Trichlorofluoromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2,3-Trichloropropane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 (24-25')
Project: SWMU NO.14
Collection Date: 7/17/2012 5:30:00 PM
Lab ID: 1207917-010
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Surr: 1,2-Dichloroethane-d4	183	70-130	S	%REC	1	7/26/2012 7:30:13 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	7/26/2012 7:30:13 PM
Surr: Dibromofluoromethane	90.3	70-130		%REC	1	7/26/2012 7:30:13 PM
Surr: Toluene-d8	94.8	70-130		%REC	1	7/26/2012 7:30:13 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:00:00 PM
Lab ID: 1207917-011
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 6:35:12 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 6:35:12 PM
Surr: DNOP	127	79.5-166		%REC	1	7/23/2012 6:35:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/24/2012 8:06:38 PM
Surr: BFB	108	69.8-119		%REC	1	7/24/2012 8:06:38 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	8/17/2012 12:32:40 PM
Beryllium	ND	0.0020		mg/L	1	8/17/2012 12:32:40 PM
Cadmium	ND	0.0020		mg/L	1	8/17/2012 12:32:40 PM
Chromium	ND	0.0060		mg/L	1	8/20/2012 10:55:39 AM
Cobalt	ND	0.0060		mg/L	1	8/17/2012 12:32:40 PM
Iron	ND	0.020		mg/L	1	8/17/2012 12:32:40 PM
Manganese	ND	0.0020		mg/L	1	8/17/2012 12:32:40 PM
Nickel	ND	0.010		mg/L	1	8/20/2012 10:55:39 AM
Silver	ND	0.0050		mg/L	1	8/17/2012 12:32:40 PM
Vanadium	ND	0.050		mg/L	1	8/17/2012 12:32:40 PM
Zinc	ND	0.010		mg/L	1	8/20/2012 10:55:39 AM
EPA 200.8: METALS						Analyst: **SNV**
Antimony	ND	0.0010		mg/L	1	7/31/2012 6:36:25 PM
Arsenic	ND	0.0010		mg/L	1	7/31/2012 6:36:25 PM
Lead	ND	0.0010		mg/L	1	7/31/2012 6:36:25 PM
Selenium	ND	0.0010		mg/L	1	7/31/2012 6:36:25 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:57:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Aniline	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Anthracene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 12:16:24 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 12:16:24 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:00:00 PM
Lab ID: 1207917-011
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Carbazole	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Chrysene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 12:16:24 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 12:16:24 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 12:16:24 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Fluorene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Isophorone	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 12:16:24 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 12:16:24 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:00:00 PM
Lab ID: 1207917-011
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 12:16:24 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 12:16:24 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 12:16:24 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Phenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Pyrene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Pyridine	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Surr: 2,4,6-Tribromophenol	100	44.2-126		%REC	1	7/25/2012 12:16:24 PM
Surr: 2-Fluorobiphenyl	80.6	37-114		%REC	1	7/25/2012 12:16:24 PM
Surr: 2-Fluorophenol	72.9	23.4-98		%REC	1	7/25/2012 12:16:24 PM
Surr: 4-Terphenyl-d14	85.8	41.3-116		%REC	1	7/25/2012 12:16:24 PM
Surr: Nitrobenzene-d5	84.6	39.5-118		%REC	1	7/25/2012 12:16:24 PM
Surr: Phenol-d5	53.5	20.9-95.9		%REC	1	7/25/2012 12:16:24 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 8:41:36 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 8:41:36 PM
Acetone	ND	10		µg/L	1	7/23/2012 8:41:36 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 8:41:36 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 8:41:36 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 8:41:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:00:00 PM
Lab ID: 1207917-011
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 8:41:36 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 8:41:36 PM
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 8:41:36 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 8:41:36 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:00:00 PM
Lab ID: 1207917-011
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 8:41:36 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	7/23/2012 8:41:36 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	7/23/2012 8:41:36 PM
Surr: Dibromofluoromethane	123	70-130		%REC	1	7/23/2012 8:41:36 PM
Surr: Toluene-d8	99.0	70-130		%REC	1	7/23/2012 8:41:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:15:00 PM
Lab ID: 1207917-012
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 7:00:23 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 7:00:23 PM
Surr: DNOP	129	79.5-166		%REC	1	7/23/2012 7:00:23 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/24/2012 8:36:56 PM
Surr: BFB	96.0	69.8-119		%REC	1	7/24/2012 8:36:56 PM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	8/17/2012 12:40:51 PM
Beryllium	ND	0.0020		mg/L	1	8/17/2012 12:40:51 PM
Cadmium	ND	0.0020		mg/L	1	8/17/2012 12:40:51 PM
Chromium	ND	0.0060		mg/L	1	8/20/2012 10:59:36 AM
Cobalt	ND	0.0060		mg/L	1	8/17/2012 12:40:51 PM
Iron	ND	0.020		mg/L	1	8/17/2012 12:40:51 PM
Manganese	ND	0.0020		mg/L	1	8/17/2012 12:40:51 PM
Nickel	ND	0.010		mg/L	1	8/20/2012 10:59:36 AM
Silver	ND	0.0050		mg/L	1	8/17/2012 12:40:51 PM
Vanadium	ND	0.050		mg/L	1	8/17/2012 12:40:51 PM
Zinc	ND	0.010		mg/L	1	8/20/2012 10:59:36 AM
EPA 200.8: METALS						Analyst: **SNV**
Antimony	ND	0.0010		mg/L	1	7/31/2012 6:40:21 PM
Arsenic	ND	0.0010		mg/L	1	7/31/2012 6:40:21 PM
Lead	ND	0.0010		mg/L	1	7/31/2012 6:40:21 PM
Selenium	ND	0.0010		mg/L	1	7/31/2012 6:40:21 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:59:37 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Aniline	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Anthracene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 12:46:00 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 12:46:00 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

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Project: SWMU NO.14
Collection Date: 7/17/2012 6:15:00 PM
Lab ID: 1207917-012
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Carbazole	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Chrysene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 12:46:00 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 12:46:00 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 12:46:00 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Fluorene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Isophorone	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 12:46:00 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 12:46:00 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:15:00 PM
Lab ID: 1207917-012
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 12:46:00 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 12:46:00 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 12:46:00 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Phenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Pyrene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Pyridine	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Surr: 2,4,6-Tribromophenol	95.4	44.2-126		%REC	1	7/25/2012 12:46:00 PM
Surr: 2-Fluorobiphenyl	86.6	37-114		%REC	1	7/25/2012 12:46:00 PM
Surr: 2-Fluorophenol	66.4	23.4-98		%REC	1	7/25/2012 12:46:00 PM
Surr: 4-Terphenyl-d14	93.3	41.3-116		%REC	1	7/25/2012 12:46:00 PM
Surr: Nitrobenzene-d5	85.5	39.5-118		%REC	1	7/25/2012 12:46:00 PM
Surr: Phenol-d5	52.6	20.9-95.9		%REC	1	7/25/2012 12:46:00 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 9:11:35 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 9:11:35 PM
Acetone	ND	10		µg/L	1	7/23/2012 9:11:35 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 9:11:35 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 9:11:35 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 9:11:35 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:15:00 PM
Lab ID: 1207917-012
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 9:11:35 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 9:11:35 PM
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 9:11:35 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 9:11:35 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071712
Project: SWMU NO.14
Collection Date: 7/17/2012 6:15:00 PM
Lab ID: 1207917-012
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 9:11:35 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	7/23/2012 9:11:35 PM
Surr: 4-Bromofluorobenzene	117	70-130		%REC	1	7/23/2012 9:11:35 PM
Surr: Dibromofluoromethane	112	70-130		%REC	1	7/23/2012 9:11:35 PM
Surr: Toluene-d8	106	70-130		%REC	1	7/23/2012 9:11:35 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup **Client Sample ID:** TRIP BLANK
Project: SWMU NO.14 **Collection Date:**
Lab ID: 1207917-013 **Matrix:** TRIP BLANK **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 9:41:26 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 9:41:26 PM
Acetone	ND	10		µg/L	1	7/23/2012 9:41:26 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 9:41:26 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 9:41:26 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 9:41:26 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 9:41:26 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 9:41:26 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207917-013
Matrix: TRIP BLANK
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 9:41:26 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 9:41:26 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 9:41:26 PM
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	7/23/2012 9:41:26 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	7/23/2012 9:41:26 PM
Surr: Dibromofluoromethane	116	70-130		%REC	1	7/23/2012 9:41:26 PM
Surr: Toluene-d8	97.0	70-130		%REC	1	7/23/2012 9:41:26 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	120724077
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1207917
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	120724077-001	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-001D / SWMU 14-4 (0-0.5')	**Sampling Time**	1:18 PM	**Extraction Date**	
		Sample Location			
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.466	7/31/2012	CRW	EPA 335.4	
%moisture	4.8	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-002	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-002D / SWMU 14-4 (1.5-2.0')	**Sampling Time**	1:30 PM	**Extraction Date**	
		Sample Location			
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.566	7/31/2012	CRW	EPA 335.4	
%moisture	13.6	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	120724077
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1207917
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	120724077-003	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-003D / SWMU 14-4 (10-12')	**Sampling Time**	2:00 PM	**Extraction Date**	
		Sample Location			
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.534	7/31/2012	CRW	EPA 335.4	
%moisture	14.1	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-004	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-004D / SWMU 14-4 (19.5-20')	**Sampling Time**	2:15 PM	**Extraction Date**	
		Sample Location			
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.509	7/31/2012	CRW	EPA 335.4	
%moisture	13	Percent		7/31/2012	CRW	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-005	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-005D / SWMU 14-2 (0-0.5')	**Sampling Time**	4:10 PM	**Extraction Date**	
		Sample Location			
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.511	7/31/2012	CRW	EPA 335.4	
%moisture	6.3	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-006	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-006D / SWMU 14-2 (1.5-2.0')	**Sampling Time**	4:24 PM	**Extraction Date**	
		Sample Location			
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.534	7/31/2012	CRW	EPA 335.4	
%moisture	9.7	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-007	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012	12:47 PM	
Client Sample ID	1207917-007D / SWMU 14-2 (8-10')	**Sampling Time**	4:45 PM	**Extraction Date**			
		Sample Location					
Matrix	Soil						
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.574	7/31/2012	CRW	EPA 335.4	
%moisture	17.5	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-008	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012	12:47 PM	
Client Sample ID	1207917-008D / SWMU 14-2 (8-10') DUP	**Sampling Time**	4:45 PM	**Extraction Date**			
		Sample Location					
Matrix	Soil						
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.609	7/31/2012	CRW	EPA 335.4	
%moisture	17.7	Percent		7/31/2012	CRW	%moisture	

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-009	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-009D / SWMU 14-2 (16-18')	**Sampling Time**	5:10 PM	**Extraction Date**	
		Sample Location			
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.587	7/31/2012	CRW	EPA 335.4	
%moisture	14.8	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-010	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-010D / SWMU 14-2 (24-25')	**Sampling Time**	5:30 PM	**Extraction Date**	
		Sample Location			
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.542	7/31/2012	CRW	EPA 335.4	
%moisture	12.1	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	120724077
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1207917
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	120724077-011	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-011F / FB071712	**Sampling Time**	6:00 PM	**Extraction Date**	
		Sample Location			
Matrix	Water				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Sample Number	120724077-012	**Sampling Date**	7/17/2012	**Date/Time Received**	7/24/2012 12:47 PM
Client Sample ID	1207917-012F / FB071712	**Sampling Time**	6:15 PM	**Extraction Date**	
		Sample Location			
Matrix	Water				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139688** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139689** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0.0005000	98.2	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.6	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Silver	0.097	0.0050	0.1000	0	96.9	85	115			
Vanadium	0.50	0.050	0.5000	0	101	85	115			

Sample ID **1207807-002BMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139709** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.60	0.0020	0.5000	0.08916	102	70	130			

Sample ID **1207807-002BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.59	0.0020	0.5000	0.08916	99.9	70	130	1.42	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Nickel	ND	0.010								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140608** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.0	85	115			
Nickel	0.46	0.010	0.5000	0	92.5	85	115			
Zinc	0.48	0.010	0.5000	0	95.6	85	115			

Sample ID **1207B81-004AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140624** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.3	70	130			
Nickel	0.44	0.010	0.5000	0	88.9	70	130			
Zinc	0.47	0.010	0.5000	0.009760	92.7	70	130			

Sample ID **1207B81-004AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140625** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.5	70	130	0.186	20	
Nickel	0.44	0.010	0.5000	0	88.8	70	130	0.0540	20	
Zinc	0.47	0.010	0.5000	0.009760	92.2	70	130	0.517	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207508-003AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128501** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.033	0.0010	0.02500	0.008736	97.7	70	130			

Sample ID **1207608-004AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128507** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	70	130			
Arsenic	0.025	0.0010	0.02500	0	99.9	70	130			
Selenium	0.025	0.0010	0.02500	0	102	70	130			

Sample ID **1207806-004AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128522** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	70	130			
Arsenic	0.025	0.0010	0.02500	0	100	70	130			
Selenium	0.029	0.0010	0.02500	0.004090	98.9	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128780** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.028	0.0010	0.02500	0	112	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128781** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.024	0.0010	0.02500	0	97.4	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Metals**		
Client ID: **PBW**	Batch ID: **R4578**	RunNo: **4578**		
Prep Date:	Analysis Date: **7/31/2012**	SeqNo: **128782**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Metals**		
Client ID: **PBW**	Batch ID: **R4578**	RunNo: **4578**		
Prep Date:	Analysis Date: **7/31/2012**	SeqNo: **128784**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2980** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **2980** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122215** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-2980** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **2980** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122216** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.7	80	120			

Sample ID **1207906-001BMS** SampType: **MS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **2980** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122218** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.1	75	125			

Sample ID **1207906-001BMSD** SampType: **MSD** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **2980** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122219** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.4	75	125	0.305	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2946** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120621** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	77.6	140			

Sample ID **LCS-2946** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120623** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	76.3	52.6	130			
Surr: DNOP	4.5		5.000		90.5	77.6	140			

Sample ID **1207838-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120626** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.7	48.73	0	78.1	57.2	146			
Surr: DNOP	4.4		4.873		89.6	77.6	140			

Sample ID **1207838-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120627** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.9	49.55	0	71.7	57.2	146	6.92	24.5	
Surr: DNOP	4.4		4.955		88.1	77.6	140	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**MB-2965**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Diesel Range**						
Client ID:	**PBW**	Batch ID:	**2965**	RunNo:	**4229**						
Prep Date:	**7/23/2012**	Analysis Date:	**7/23/2012**	SeqNo:	**121391**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		ND	1.0								
Motor Oil Range Organics (MRO)		ND	5.0								
Surr: DNOP		1.2		1.000		123	79.5	166			

Sample ID	**LCS-2965**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range**						
Client ID:	**LCSW**	Batch ID:	**2965**	RunNo:	**4229**						
Prep Date:	**7/23/2012**	Analysis Date:	**7/23/2012**	SeqNo:	**121392**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		5.0	1.0	5.000	0	99.0	74	157			
Surr: DNOP		0.51		0.5000		102	79.5	166			

Sample ID	**LCSD-2965**	SampType:	**LCSD**	TestCode:	**EPA Method 8015B: Diesel Range**						
Client ID:	**LCSS02**	Batch ID:	**2965**	RunNo:	**4229**						
Prep Date:	**7/23/2012**	Analysis Date:	**7/23/2012**	SeqNo:	**121393**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		5.0	1.0	5.000	0	99.9	74	157	0.931	23	
Surr: DNOP		0.53		0.5000		106	79.5	166	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R4415** RunNo: **4415**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123776** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		98.5	84	116			

Sample ID **2.5UG GRO LCSB** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R4415** RunNo: **4415**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123777** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	85	115			
Surr: BFB	1000		1000		103	84	116			

Sample ID **1207A80-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4415** RunNo: **4415**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123779** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	89	25	93.31	0	95.2	70	130			
Surr: BFB	3800		3732		103	84	116			

Sample ID **1207A80-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4415** RunNo: **4415**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123780** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	89	25	93.31	0	95.1	70	130	0.168	22.1	
Surr: BFB	3900		3732		104	84	116	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122827** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.5	69.8	119			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122828** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	75.9	119			
Surr: BFB	21		20.00		103	69.8	119			

Sample ID **1207819-004AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122835** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.7	0.25	2.500	2.307	94.7	75.4	121			
Surr: BFB	100		100.0		103	69.8	119			

Sample ID **1207819-004AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122836** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.1	0.25	2.500	2.307	71.5	75.4	121	13.2	10.5	SR
Surr: BFB	96		100.0		96.5	69.8	119	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R4233**	RunNo: **4233**	
Prep Date:	Analysis Date: **7/21/2012**	SeqNo: **121267**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b5** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	107	70.7	123			
Toluene	1.1	0.050	1.000	0	107	80	120			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	99.0	63.1	148			
Trichloroethene (TCE)	0.89	0.050	1.000	0	88.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		121	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		89.3	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID **1207900-002b ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.6439	0.006767	108	81.3	119			
Toluene	0.65	0.050	0.6439	0	100	75	121			
Chlorobenzene	0.64	0.050	0.6439	0	99.6	78.5	120			
1,1-Dichloroethene	0.68	0.050	0.6439	0	106	75.3	115			
Trichloroethene (TCE)	0.61	0.050	0.6439	0	94.7	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		97.6	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3220		97.9	70	130			
Surr: Dibromofluoromethane	0.32		0.3220		98.8	70	130			
Surr: Toluene-d8	0.32		0.3220		101	70	130			

Sample ID **1207900-002b msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121270** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6439	0.006767	103	81.3	119	4.25	15.7	
Toluene	0.63	0.050	0.6439	0	98.3	75	121	2.14	16.2	
Chlorobenzene	0.65	0.050	0.6439	0	101	78.5	120	1.27	14.9	
1,1-Dichloroethene	0.60	0.050	0.6439	0	93.7	75.3	115	12.0	31.8	
Trichloroethene (TCE)	0.55	0.050	0.6439	0	85.7	67.8	119	10.0	16.5	
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.3220		97.7	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3220		92.3	70	130	0	0	
Surr: Toluene-d8	0.32		0.3220		100	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R4379**	RunNo: **4379**	
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **122014**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	105	70.7	123			
Toluene	0.96	0.050	1.000	0	95.5	80	120			
Chlorobenzene	0.98	0.050	1.000	0	97.9	70	130			
1,1-Dichloroethene	0.93	0.050	1.000	0	92.5	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207940-007b ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122016** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	44	2.5	42.92	2.856	95.9	81.3	119			
Toluene	56	2.5	42.92	14.08	97.1	75	121			
Chlorobenzene	42	2.5	42.92	0	97.1	78.5	120			
1,1-Dichloroethene	39	2.5	42.92	0	91.6	75.3	115			
Trichloroethene (TCE)	37	2.5	42.92	0	85.1	67.8	119			
Surr: 1,2-Dichloroethane-d4	20		21.46		92.0	70	130			
Surr: 4-Bromofluorobenzene	20		21.46		93.8	70	130			
Surr: Dibromofluoromethane	22		21.46		101	70	130			
Surr: Toluene-d8	22		21.46		102	70	130			

Sample ID **1207940-007b msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122017** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	42.92	2.856	93.9	81.3	119	1.96	15.7	
Toluene	54	2.5	42.92	14.08	92.6	75	121	3.49	16.2	
Chlorobenzene	42	2.5	42.92	0	97.0	78.5	120	0.0484	14.9	
1,1-Dichloroethene	37	2.5	42.92	0	85.4	75.3	115	7.02	31.8	
Trichloroethene (TCE)	36	2.5	42.92	0	84.2	67.8	119	1.08	16.5	
Surr: 1,2-Dichloroethane-d4	20		21.46		94.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	20		21.46		92.2	70	130	0	0	
Surr: Dibromofluoromethane	23		21.46		106	70	130	0	0	
Surr: Toluene-d8	21		21.46		99.9	70	130	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4233**	RunNo: **4233**			
Prep Date:	Analysis Date: **7/20/2012**	SeqNo: **120975**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120975** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120980** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.6	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120980** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **1207711-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120981** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	66.8	128			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **1207711-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120982** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	66.8	128	0.0297	16.7	
Toluene	22	1.0	20.00	0	110	70	130	4.99	18.7	
Chlorobenzene	21	1.0	20.00	0	104	70	130	0.103	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	7.04	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.3	70	130	2.25	17.5	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		119	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Sample ID **100ng lcsb** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **121820** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	93.4	80	120			
Chlorobenzene	19	1.0	20.00	0	97.1	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	83	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcsb** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **121820** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	21	1.0	20.00	0	104	76.2	119			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID **1207855-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **121821** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	19	1.0	20.00	0	93.3	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	112	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		112	70	130			
Surr: 4-Bromofluorobenzene	8.0		10.00		80.1	70	130			
Surr: Dibromofluoromethane	13		10.00		130	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

Sample ID **1207855-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **121822** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	19	1.0	20.00	0	94.4	70	130	1.11	19.5	
1,1-Dichloroethene	20	1.0	20.00	0	99.3	70	130	12.5	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	93.1	70	130	18.0	17.5	R
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.2		10.00		82.4	70	130	0	0	
Surr: Dibromofluoromethane	12		10.00		115	70	130	0	0	
Surr: Toluene-d8	11		10.00		110	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R4379**	RunNo: **4379**	
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **122005**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122008** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	95.5	80	120			
Chlorobenzene	20	1.0	20.00	0	97.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.5	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122636** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	4.0								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122639** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **1207922-010a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **122640** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **1207922-010a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **122641** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		103	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID **5 ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4375** RunNo: **4375**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **123094** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5 ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4375**	RunNo: **4375**			
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **123094**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5 ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R4375**	RunNo: **4375**	
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **123094**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2962**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **2962**	RunNo: **4428**			
Prep Date: **7/23/2012**	Analysis Date: **7/25/2012**	SeqNo: **123425**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2962** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **2962** RunNo: **4428**
Prep Date: **7/23/2012** Analysis Date: **7/25/2012** SeqNo: **123425** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		94.9	20.1	121			
Surr: 2-Fluorobiphenyl	1.5		1.670		86.9	19	133			
Surr: 2-Fluorophenol	2.4		3.330		73.0	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		91.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		79.4	20.8	123			
Surr: Phenol-d5	2.6		3.330		78.8	19.8	115			

Sample ID **lcs-2962** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2962** RunNo: **4428**
Prep Date: **7/23/2012** Analysis Date: **7/25/2012** SeqNo: **123426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-2962** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2962** RunNo: **4428**
Prep Date: **7/23/2012** Analysis Date: **7/25/2012** SeqNo: **123426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	72.7	49.7	98.1			
4-Chloro-3-methylphenol	2.5	0.50	3.330	0	73.7	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	62.5	41.1	96.9			
1,4-Dichlorobenzene	0.96	0.20	1.670	0	57.6	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	83.6	44.4	104			
N-Nitrosodi-n-propylamine	1.3	0.20	1.670	0	75.2	39.1	86.9			
4-Nitrophenol	2.7	0.25	3.330	0	79.7	44.2	107			
Pentachlorophenol	2.4	0.40	3.330	0	71.3	36.2	80			
Phenol	2.3	0.20	3.330	0	69.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	71.1	34.7	98.8			
1,2,4-Trichlorobenzene	1.1	0.20	1.670	0	66.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		100	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		77.9	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.4	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		89.3	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		73.4	20.8	123			
Surr: Phenol-d5	2.6		3.330		78.5	19.8	115			

Sample ID **mb-2996** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124345** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2996**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **2996**	RunNo: **4454**			
Prep Date: **7/24/2012**	Analysis Date: **7/26/2012**	SeqNo: **124345**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2996** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124345** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		79.2	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.3	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		87.9	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.2	20.8	123			
Surr: Phenol-d5	2.7		3.330		82.4	19.8	115			

Sample ID **lcs-2996** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124346** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	69.0	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	67.9	41.1	96.9			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	61.9	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	80.8	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.1	39.1	86.9			
4-Nitrophenol	2.8	0.25	3.330	0	82.9	44.2	107			
Pentachlorophenol	2.3	0.40	3.330	0	68.1	36.2	80			
Phenol	2.5	0.20	3.330	0	73.9	42.7	92.7			
Pyrene	1.0	0.20	1.670	0	62.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.4	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.8		3.330		82.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		75.6	19	133			
Surr: 2-Fluorophenol	2.2		3.330		66.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.8	20.8	123			
Surr: Phenol-d5	2.5		3.330		74.7	19.8	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207666-001Ams** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124359** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.3	1.0	8.322	0	75.9	38.6	100			
4-Chloro-3-methylphenol	14	2.5	16.59	0	86.5	35.8	108			
2-Chlorophenol	13	1.0	16.59	0	79.4	48.2	96.1			
1,4-Dichlorobenzene	6.0	1.0	8.322	0	72.5	42.5	97.6			
2,4-Dinitrotoluene	7.0	2.5	8.322	0	84.0	51.2	108			
N-Nitrosodi-n-propylamine	7.0	1.0	8.322	0	84.7	31.6	114			
4-Nitrophenol	16	1.2	16.59	0.3837	94.3	22.7	144			
Pentachlorophenol	9.8	2.0	16.59	0	59.3	24	109			
Phenol	17	1.0	16.59	6.194	66.9	33.1	108			
Pyrene	5.2	1.0	8.322	0	62.5	42.7	98.9			
1,2,4-Trichlorobenzene	6.1	1.0	8.322	0	73.0	27.1	118			
Surr: 2,4,6-Tribromophenol	15		16.59		92.7	20.1	121			
Surr: 2-Fluorobiphenyl	6.6		8.322		79.8	19	133			
Surr: 2-Fluorophenol	13		16.59		75.7	20.2	108			
Surr: 4-Terphenyl-d14	6.3		8.322		75.6	18.9	115			
Surr: Nitrobenzene-d5	6.7		8.322		80.5	20.8	123			
Surr: Phenol-d5	15		16.59		88.8	19.8	115			

Sample ID **1207666-001Amsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.2	1.0	8.406	0	73.4	38.6	100	2.26	20	
4-Chloro-3-methylphenol	14	2.5	16.76	0	81.8	35.8	108	4.66	20	
2-Chlorophenol	13	1.0	16.76	0	79.6	48.2	96.1	1.28	20	
1,4-Dichlorobenzene	6.2	1.0	8.406	0	73.6	42.5	97.6	2.48	20	
2,4-Dinitrotoluene	6.8	2.5	8.406	0	81.0	51.2	108	2.63	20	
N-Nitrosodi-n-propylamine	7.4	1.0	8.406	0	88.4	31.6	114	5.25	20	
4-Nitrophenol	15	1.3	16.76	0.3837	86.4	22.7	144	7.52	20	
Pentachlorophenol	10	2.0	16.76	0	61.0	24	109	3.78	20	
Phenol	20	1.0	16.76	6.194	81.0	33.1	108	13.4	20	
Pyrene	4.8	1.0	8.406	0	57.5	42.7	98.9	7.41	20	
1,2,4-Trichlorobenzene	6.3	1.0	8.406	0	74.7	27.1	118	3.30	20	
Surr: 2,4,6-Tribromophenol	15		16.76		88.4	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	6.3		8.406		75.1	19	133	0	0	
Surr: 2-Fluorophenol	14		16.76		81.8	20.2	108	0	0	
Surr: 4-Terphenyl-d14	6.1		8.406		72.3	18.9	115	0	0	
Surr: Nitrobenzene-d5	6.7		8.406		79.6	20.8	123	0	0	
Surr: Phenol-d5	15		16.76		88.2	19.8	115	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2989**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **2989**	RunNo: **4400**			
Prep Date: **7/24/2012**	Analysis Date: **7/24/2012**	SeqNo: **122513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2989**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **2989**	RunNo: **4400**			
Prep Date: **7/24/2012**	Analysis Date: **7/24/2012**	SeqNo: **122513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	170		200.0		85.4	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		85.5	37	114			
Surr: 2-Fluorophenol	120		200.0		61.4	23.4	98			
Surr: 4-Terphenyl-d14	79		100.0		79.3	41.3	116			
Surr: Nitrobenzene-d5	84		100.0		84.2	39.5	118			
Surr: Phenol-d5	110		200.0		53.2	20.9	95.9			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-2989** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **2989** RunNo: **4400**
Prep Date: **7/24/2012** Analysis Date: **7/24/2012** SeqNo: **122514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.1	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	35.5	108			
2-Chlorophenol	130	10	200.0	0	62.6	29.8	106			
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5			
2,4-Dinitrotoluene	83	10	100.0	0	82.7	44.7	112			
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.3	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	61.2	20.2	93			
Phenol	84	10	200.0	0	42.0	23	66.1			
Pyrene	71	10	100.0	0	71.2	40.1	101			
1,2,4-Trichlorobenzene	54	10	100.0	0	53.7	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		81.9	44.2	126			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	37	114			
Surr: 2-Fluorophenol	98		200.0		49.2	23.4	98			
Surr: 4-Terphenyl-d14	71		100.0		70.6	41.3	116			
Surr: Nitrobenzene-d5	65		100.0		65.1	39.5	118			
Surr: Phenol-d5	91		200.0		45.5	20.9	95.9			

Sample ID **lcsd-2989** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **2989** RunNo: **4400**
Prep Date: **7/24/2012** Analysis Date: **7/24/2012** SeqNo: **122515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	69.9	38.2	99.4	2.61	20	
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	35.5	108	13.1	20	
2-Chlorophenol	110	10	200.0	0	55.6	29.8	106	11.9	20	
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5	0.0854	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.2	44.7	112	9.75	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.6	38.5	105	5.82	20	
4-Nitrophenol	92	10	200.0	0	46.1	11.6	73.1	2.55	20	
Pentachlorophenol	110	20	200.0	0	57.5	20.2	93	6.30	20	
Phenol	83	10	200.0	0	41.5	23	66.1	1.15	20	
Pyrene	71	10	100.0	0	71.2	40.1	101	0	20	
1,2,4-Trichlorobenzene	56	10	100.0	0	55.5	37.7	99.1	3.33	20	
Surr: 2,4,6-Tribromophenol	150		200.0		75.1	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	73		100.0		73.1	37	114	0	0	
Surr: 2-Fluorophenol	81		200.0		40.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	80		100.0		79.8	41.3	116	0	0	
Surr: Nitrobenzene-d5	70		100.0		70.1	39.5	118	0	0	
Surr: Phenol-d5	88		200.0		44.2	20.9	95.9	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3131** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128955** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-3131** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128956** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	93.3	80	120			

Sample ID **1207B18-001BMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128971** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.21	0.033	0.1648	0.06444	87.3	75	125			

Sample ID **1207B18-001BMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128972** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1651	0.06444	84.5	75	125	2.10	20	

Sample ID **MB-3180** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **3180** RunNo: **4662**
Prep Date: **8/3/2012** Analysis Date: **8/3/2012** SeqNo: **131070** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-3180** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **3180** RunNo: **4662**
Prep Date: **8/3/2012** Analysis Date: **8/3/2012** SeqNo: **131071** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Sample ID **1207917-009CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 14-2 (16-18')** Batch ID: **3180** RunNo: **4662**
Prep Date: **8/3/2012** Analysis Date: **8/3/2012** SeqNo: **131078** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1658	0	98.9	75	125			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207917-009CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 14-2 (16-18')** Batch ID: **3180** RunNo: **4662**
Prep Date: **8/3/2012** Analysis Date: **8/3/2012** SeqNo: **131081** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1651	0	115	75	125	14.8	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3107** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3107** RunNo: **4677**
Prep Date: **7/31/2012** Analysis Date: **8/6/2012** SeqNo: **131415** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-3107** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3107** RunNo: **4677**
Prep Date: **7/31/2012** Analysis Date: **8/6/2012** SeqNo: **131416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	96.5	80	120			
Barium	23	0.10	25.00	0	91.0	80	120			
Beryllium	25	0.15	25.00	0	98.2	80	120			
Cadmium	23	0.10	25.00	0	91.9	80	120			
Chromium	23	0.30	25.00	0	90.5	80	120			
Lead	23	0.25	25.00	0	91.2	80	120			
Manganese	22	0.10	25.00	0	89.5	80	120			
Nickel	22	0.50	25.00	0	88.1	80	120			
Selenium	23	2.5	25.00	0	93.1	80	120			
Silver	4.6	0.25	5.000	0	92.6	80	120			
Vanadium	24	2.5	25.00	0	94.5	80	120			
Zinc	23	2.5	25.00	0	93.0	80	120			

Sample ID **MB-3009** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3009** RunNo: **4698**
Prep Date: **7/24/2012** Analysis Date: **8/6/2012** SeqNo: **132140** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS-3009** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3009** RunNo: **4698**
Prep Date: **7/24/2012** Analysis Date: **8/6/2012** SeqNo: **132141** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.9555	99.3	80	120			

Sample ID **MB-3107** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3107** RunNo: **4698**
Prep Date: **7/31/2012** Analysis Date: **8/6/2012** SeqNo: **132142** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID **LCS-3107** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3107** RunNo: **4698**
Prep Date: **7/31/2012** Analysis Date: **8/6/2012** SeqNo: **132143** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.7880	103	80	120			

Sample ID **MB-3009** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132220** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-3009** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132221** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	28	2.5	25.00	0	114	80	120			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS-3009** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132221** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	27	0.10	25.00	0	107	80	120			
Beryllium	29	0.15	25.00	0.01250	117	80	120			
Cadmium	27	0.10	25.00	0	110	80	120			
Chromium	26	0.30	25.00	0	106	80	120			
Cobalt	29	0.30	25.00	0	115	80	120			
Lead	27	0.25	25.00	0	110	80	120			
Manganese	26	0.10	25.00	0.07300	106	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	30	2.5	25.00	0	121	80	120			S
Silver	5.4	0.25	5.000	0	108	80	120			
Vanadium	27	2.5	25.00	0.07050	109	80	120			
Zinc	29	2.5	25.00	0	116	80	120			

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-2 (0-0.5')** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132249** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	12	23.84	0	89.4	75	125			
Beryllium	24	0.75	23.84	0.6761	97.6	75	125			
Cadmium	22	0.50	23.84	0	90.6	75	125			
Chromium	29	1.5	23.84	8.850	84.7	75	125			
Cobalt	26	1.5	23.84	4.445	90.6	75	125			
Lead	23	1.2	23.84	3.311	82.6	75	125			
Nickel	27	2.5	23.84	6.181	86.9	75	125			
Silver	4.0	1.2	4.768	0	83.8	75	125			

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-2 (0-0.5')** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132250** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	12	24.91	0	94.6	75	125	9.99	20	
Beryllium	25	0.75	24.91	0.6761	98.4	75	125	5.04	20	
Cadmium	23	0.50	24.91	0	90.6	75	125	4.33	20	
Chromium	32	1.5	24.91	8.850	94.1	75	125	10.6	20	
Cobalt	27	1.5	24.91	4.445	91.3	75	125	4.29	20	
Lead	25	1.2	24.91	3.311	87.3	75	125	8.61	20	
Nickel	29	2.5	24.91	6.181	91.7	75	125	7.56	20	
Silver	4.4	1.2	4.982	0	88.1	75	125	9.44	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3107** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3107** RunNo: **4734**
Prep Date: **7/31/2012** Analysis Date: **8/8/2012** SeqNo: **133431** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Cobalt	ND	0.30								

Sample ID **LCS-3107** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3107** RunNo: **4734**
Prep Date: **7/31/2012** Analysis Date: **8/8/2012** SeqNo: **133432** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	26	2.5	25.00	0	103	80	120			
Cobalt	24	0.30	25.00	0	94.8	80	120			

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-2 (0-0.5')** Batch ID: **3009** RunNo: **4734**
Prep Date: **7/24/2012** Analysis Date: **8/8/2012** SeqNo: **133485** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	13	12	23.84	0	54.1	75	125			S
Vanadium	43	12	23.84	31.42	47.7	75	125			S

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-2 (0-0.5')** Batch ID: **3009** RunNo: **4734**
Prep Date: **7/24/2012** Analysis Date: **8/8/2012** SeqNo: **133486** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	14	12	24.91	0	57.7	75	125	10.9	20	S
Vanadium	55	12	24.91	31.42	93.0	75	125	24.2	20	R

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-2 (0-0.5')** Batch ID: **3009** RunNo: **4816**
Prep Date: **7/24/2012** Analysis Date: **8/10/2012** SeqNo: **135933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	23.84	3.961	28.4	75	125			S
Zinc	35	13	23.84	16.80	76.6	75	125			

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-2 (0-0.5')** Batch ID: **3009** RunNo: **4816**
Prep Date: **7/24/2012** Analysis Date: **8/10/2012** SeqNo: **135934** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	24.91	3.961	34.3	75	125	0	20	S
Zinc	39	13	24.91	16.80	90.3	75	125	11.4	20	

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207917**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207917-006CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-2 (1.5-2.0'** Batch ID: **3107** RunNo: **4816**
Prep Date: **7/31/2012** Analysis Date: **8/10/2012** SeqNo: **135937** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	13	12	24.90	3.628	37.5	75	125			S
Arsenic	24	12	24.90	0	95.2	75	125			
Beryllium	25	0.75	24.90	0.7577	99.3	75	125			
Cadmium	24	0.50	24.90	0	94.7	75	125			
Chromium	37	1.5	24.90	12.12	99.0	75	125			
Cobalt	27	1.5	24.90	3.833	91.0	75	125			
Lead	23	1.2	24.90	4.390	76.5	75	125			
Nickel	30	2.5	24.90	7.255	90.8	75	125			
Selenium	19	12	24.90	0	77.0	75	125			
Silver	4.5	1.2	4.981	0	89.7	75	125			
Vanadium	50	12	24.90	20.97	117	75	125			
Zinc	49	12	24.90	35.46	52.9	75	125			S

Sample ID **1207917-006CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-2 (1.5-2.0'** Batch ID: **3107** RunNo: **4816**
Prep Date: **7/31/2012** Analysis Date: **8/10/2012** SeqNo: **135940** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.81	3.628	35.3	75	125	200	20	S
Arsenic	22	12	24.81	0	88.4	75	125	7.79	20	
Beryllium	25	0.75	24.81	0.7577	96.5	75	125	3.15	20	
Cadmium	23	0.50	24.81	0	92.9	75	125	2.30	20	
Chromium	33	1.5	24.81	12.12	84.2	75	125	10.8	20	
Cobalt	26	1.5	24.81	3.833	89.7	75	125	1.59	20	
Lead	23	1.2	24.81	4.390	76.6	75	125	0.134	20	
Nickel	28	2.5	24.81	7.255	82.8	75	125	7.18	20	
Selenium	18	12	24.81	0	70.7	75	125	8.91	20	S
Silver	4.3	1.2	4.962	0	86.6	75	125	3.84	20	
Vanadium	46	12	24.81	20.97	98.9	75	125	9.82	20	
Zinc	51	12	24.81	35.46	63.8	75	125	5.31	20	S

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1207917**

Received by/date: 07/20/12

Logged By: **Ashley Gallegos** **7/20/2012 7:55:00 AM**

Completed By: **Ashley Gallegos** **7/20/2012 11:37:29 AM**

Reviewed By: 07/20/12

Chain of Custody

1. Were seals intact? Yes No Not Present ✔
2. Is Chain of Custody complete? Yes ✔ No Not Present
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ✔ No NA
5. Was an attempt made to cool the samples? Yes ✔ No NA
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ✔ No NA
7. Sample(s) in proper container(s)? Yes ✔ No
8. Sufficient sample volume for indicated test(s)? Yes ✔ No
9. Are samples (except VOA and ONG) properly preserved? Yes ✔ No
10. Was preservative added to bottles? Yes No ✔ NA
11. VOA vials have zero headspace? Yes No No VOA Vials ✔
12. Were any sample containers received broken? Yes No ✔
13. Does paperwork match bottle labels? Yes ✔ No
    (Note discrepancies on chain of custody)
    # of preserved bottles checked for pH: 3 2 (<2 or >12 unless noted)
14. Are matrices correctly identified on Chain of Custody? Yes ✔ No
    Adjusted?
15. Is it clear what analyses were requested? Yes ✔ No
16. Were all holding times able to be met? Yes ✔ No
    (If no, notify customer for authorization.)
    Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____
Project Name: SWMU NO. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207917	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7.17.12	1318	SOIL	SWMU 14-4 (0-0.5')	2 ENCORES	—	-001										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1330		SWMU 14-4 (1.5-2.0')	2 ENCORES	—	-002										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1400		SWMU 14-4 (10-12')	2 ENCORES	—	-003										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1415		SWMU 14-4 (19.5-20')	2 ENCORES	—	-004										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7.18.12	0730	[signature]	[signature]	07/20/12	0755
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207917	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7.17.12	1610	SOIL	SWMU 14-2 (0-0.5')	2 ENCORES	—	-005										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1624		SWMU 14-2 (1.5-2.0')	2 ENCORES	—	-006										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1645		SWMU 14-2 (8-10')	2 ENCORES	—	-007										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1645		SWMU 14-2 (8-10') DUP	2 ENCORES	—	-008										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7.18.12	0730	[illegible]	[illegible]	07/20/12	0755
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING SW INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU NO. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207917	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7.17.12	1710	SOIL	SWMU 14-2 (16-18')	2 ENCORES	—	-009										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1730		SWMU 14-2 (24-25')	2 ENCORES	—	-010										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7.18.12	0730	[signature]	[signature]	07/20/12	0755
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING SW INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU NO. 14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207917	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TPH	METALS			Air Bubbles (Y or N)
7.17.12	1800	WATER	FB071712	6 VOA	HCL & NEAT	-011										X		X				
				1L AMBER													X					
				PLASTIC	HNO_3														X			
				PLASTIC	NAOH														X			
	1815	WATER	EB071712	6 VOA	HCL & NEAT	-012										X		X				
				1L AMBER													X					
				PLASTIC	HNO_3														X			
				PLASTIC	NAOH														X			
7.17.12	—	WATER	TRIP BLANK	VOA	HCL	-013										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
7.18.12	0730	[signature]	[signature]	07/20/12	0755
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Metals List for SWMU No. 14 Old API Separator
Gallup Refinery
Western Refining Southwest, Inc.

Analyte	Analytical Method
Antimony	SW-846 method 6010/6020
Arsenic	SW-846 method 6010/6020
Barium	SW-846 method 6010/6020
Beryllium	SW-846 method 6010/6020
Cadmium	SW-846 method 6010/6020
Chromium	SW-846 method 6010/6020
Cobalt	SW-846 method 6010/6020
Cyanide	SW-846 method 335.4/335.2 mod
Lead	SW-846 method 6010/6020
Mercury	SW-846 method 7470/7471
Nickel	SW-846 method 6010/6020
Selenium	SW-846 method 6010/6020
Silver	SW-846 method 6010/6020
Vanadium	SW-846 method 6010/6020
Zinc	SW-846 method 6010/6020
Iron	SW-846 method 6010/6020
Manganese	SW-846 method 6010/6020

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 22, 2012

Thurman B. Larsen

Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: SWMU NO.14 OrderNo.: 1207922

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 10 sample(s) on 7/20/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1000	200		mg/Kg	20	7/21/2012 11:21:42 PM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/21/2012 11:21:42 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 11:21:42 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/26/2012 5:56:39 PM
Surr: BFB	100	84-116		%REC	10	7/26/2012 5:56:39 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.68	0.16		mg/Kg	5	8/3/2012 4:15:31 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	12		mg/Kg	5	8/10/2012 6:49:12 PM
Arsenic	ND	12		mg/Kg	5	8/10/2012 6:49:12 PM
Barium	480	5.0		mg/Kg	50	8/10/2012 6:52:46 PM
Beryllium	ND	0.75		mg/Kg	5	8/10/2012 6:49:12 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 6:49:12 PM
Chromium	13	1.5		mg/Kg	5	8/10/2012 6:49:12 PM
Cobalt	3.8	1.5		mg/Kg	5	8/10/2012 6:49:12 PM
Iron	14000	500		mg/Kg	500	8/10/2012 6:55:13 PM
Lead	5.5	1.2		mg/Kg	5	8/10/2012 6:49:12 PM
Manganese	1800	5.0		mg/Kg	50	8/10/2012 6:52:46 PM
Nickel	6.3	2.5		mg/Kg	5	8/10/2012 6:49:12 PM
Selenium	ND	12		mg/Kg	5	8/10/2012 6:49:12 PM
Silver	ND	1.2		mg/Kg	5	8/10/2012 6:49:12 PM
Vanadium	18	12		mg/Kg	5	8/10/2012 6:49:12 PM
Zinc	44	12		mg/Kg	5	8/10/2012 6:49:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Acenaphthylene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Aniline	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Anthracene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Azobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	2.6	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Carbazole	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 9:55:46 AM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Chrysene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 9:55:46 AM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Dibenzofuran	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 9:55:46 AM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 9:55:46 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 9:55:46 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 9:55:46 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
Fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Fluorene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Hexachloroethane	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
1-Methylnaphthalene	1.5	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2-Methylnaphthalene	1.9	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Naphthalene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 9:55:46 AM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 9:55:46 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 9:55:46 AM
Phenanthrene	1.7	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Phenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Pyrene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Surr: 2,4,6-Tribromophenol	107	20.1-121		%REC	1	7/27/2012 9:55:46 AM
Surr: 2-Fluorobiphenyl	94.9	19-133		%REC	1	7/27/2012 9:55:46 AM
Surr: 2-Fluorophenol	96.9	20.2-108		%REC	1	7/27/2012 9:55:46 AM
Surr: 4-Terphenyl-d14	99.7	18.9-115		%REC	1	7/27/2012 9:55:46 AM
Surr: Nitrobenzene-d5	99.1	20.8-123		%REC	1	7/27/2012 9:55:46 AM
Surr: Phenol-d5	87.0	19.8-115		%REC	1	7/27/2012 9:55:46 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Toluene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Ethylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Xylenes, Total	2.82	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Methyl tert-butyl ether (MTBE)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2,4-Trimethylbenzene	2.00	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,3,5-Trimethylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dichloroethane (EDC)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dibromoethane (EDB)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Naphthalene	18.3	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1-Methylnaphthalene	67.4	3.74		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2-Methylnaphthalene	107	3.74	E	µg/Kg-dry	1	7/20/2012 2:29:55 PM
Acetone	ND	9.34		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Bromobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Bromodichloromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Bromoform	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2-Butanone	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Carbon tetrachloride	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Chlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Chloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Chloroform	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2-Chlorotoluene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Carbon disulfide	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
4-Chlorotoluene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
cis-1,2-DCE	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
cis-1,3-Dichloropropene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dibromo-3-chloropropane	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Dibromochloromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Dibromomethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,3-Dichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,4-Dichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Dichlorodifluoromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1-Dichloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1-Dichloroethene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dichloropropane	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,3-Dichloropropane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2,2-Dichloropropane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1-Dichloropropene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Hexachlorobutadiene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Isopropylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
4-Isopropyltoluene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Methylene chloride	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
n-Butylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2-Hexanone	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
n-Propylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
sec-Butylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Styrene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
4-Methyl-2-pentanone	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
tert-Butylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1,1,2-Tetrachloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1,2,2-Tetrachloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Tetrachloroethene (PCE)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
trans-1,2-DCE	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
trans-1,3-Dichloropropene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2,3-Trichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2,4-Trichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1,1-Trichloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1,2-Trichloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Trichloroethene (TCE)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Trichlorofluoromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2,3-Trichloropropane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-001
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	7/20/2012 2:29:55 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	7/20/2012 2:29:55 PM
Surr: Dibromofluoromethane	95.9	70-130		%REC	1	7/20/2012 2:29:55 PM
Surr: Toluene-d8	103	70-130		%REC	1	7/20/2012 2:29:55 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5') Dup
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-002 **Matrix:** SOIL **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1000	200		mg/Kg	20	7/21/2012 11:43:41 PM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	7/21/2012 11:43:41 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 11:43:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/26/2012 6:25:29 PM
Surr: BFB	99.0	84-116		%REC	10	7/26/2012 6:25:29 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.32	0.033		mg/Kg	1	8/3/2012 4:13:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	12		mg/Kg	5	8/10/2012 6:57:51 PM
Arsenic	ND	12		mg/Kg	5	8/10/2012 6:57:51 PM
Barium	490	5.0		mg/Kg	50	8/10/2012 7:10:33 PM
Beryllium	1.0	0.75		mg/Kg	5	8/10/2012 6:57:51 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 6:57:51 PM
Chromium	22	1.5		mg/Kg	5	8/10/2012 6:57:51 PM
Cobalt	5.9	1.5		mg/Kg	5	8/10/2012 6:57:51 PM
Iron	18000	500		mg/Kg	500	8/10/2012 7:12:57 PM
Lead	40	1.2		mg/Kg	5	8/10/2012 6:57:51 PM
Manganese	460	5.0		mg/Kg	50	8/10/2012 7:10:33 PM
Nickel	11	2.5		mg/Kg	5	8/10/2012 6:57:51 PM
Selenium	ND	12		mg/Kg	5	8/10/2012 6:57:51 PM
Silver	ND	1.2		mg/Kg	5	8/10/2012 6:57:51 PM
Vanadium	29	12		mg/Kg	5	8/10/2012 6:57:51 PM
Zinc	57	12		mg/Kg	5	8/10/2012 6:57:51 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207922-002 **Matrix:** SOIL

Client Sample ID: SMWU 14-9 (0-0.5') Dup
Collection Date: 7/18/2012 4:20:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/27/2012 10:25:26 AM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/27/2012 10:25:26 AM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/27/2012 10:25:26 AM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 10:25:26 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
1-Methylnaphthalene	1.5	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2-Methylnaphthalene	1.7	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5') Dup
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-002 **Matrix:** SOIL **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 10:25:26 AM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/27/2012 10:25:26 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 10:25:26 AM
Phenanthrene	1.9	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Surr: 2,4,6-Tribromophenol	99.4	20.1-121		%REC	1	7/27/2012 10:25:26 AM
Surr: 2-Fluorobiphenyl	94.3	19-133		%REC	1	7/27/2012 10:25:26 AM
Surr: 2-Fluorophenol	94.1	20.2-108		%REC	1	7/27/2012 10:25:26 AM
Surr: 4-Terphenyl-d14	111	18.9-115		%REC	1	7/27/2012 10:25:26 AM
Surr: Nitrobenzene-d5	93.8	20.8-123		%REC	1	7/27/2012 10:25:26 AM
Surr: Phenol-d5	86.6	19.8-115		%REC	1	7/27/2012 10:25:26 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Toluene	1.71	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Ethylbenzene	2.85	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Xylenes, Total	16.8	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Methyl tert-butyl ether (MTBE)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2,4-Trimethylbenzene	8.95	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,3,5-Trimethylbenzene	2.92	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dichloroethane (EDC)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dibromoethane (EDB)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Naphthalene	47.1	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1-Methylnaphthalene	137	3.91	E	µg/Kg-dry	1	7/20/2012 3:32:59 PM
2-Methylnaphthalene	239	3.91	E	µg/Kg-dry	1	7/20/2012 3:32:59 PM
Acetone	ND	9.78		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Bromobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Bromodichloromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Bromoform	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
2-Butanone	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Carbon tetrachloride	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Chlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Chloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Chloroform	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5') Dup
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
2-Chlorotoluene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Carbon disulfide	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
4-Chlorotoluene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
cis-1,2-DCE	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
cis-1,3-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dibromo-3-chloropropane	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Dibromochloromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Dibromomethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,3-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,4-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Dichlorodifluoromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1-Dichloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1-Dichloroethene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dichloropropane	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,3-Dichloropropane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
2,2-Dichloropropane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Hexachlorobutadiene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Isopropylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
4-Isopropyltoluene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Methylene chloride	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
n-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
2-Hexanone	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
n-Propylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
sec-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Styrene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
4-Methyl-2-pentanone	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
tert-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1,1,2-Tetrachloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1,2,2-Tetrachloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Tetrachloroethene (PCE)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
trans-1,2-DCE	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
trans-1,3-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2,3-Trichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2,4-Trichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1,1-Trichloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1,2-Trichloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Trichloroethene (TCE)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Trichlorofluoromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2,3-Trichloropropane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (0-0.5') Dup
Project: SWMU NO.14
Collection Date: 7/18/2012 4:20:00 PM
Lab ID: 1207922-002
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	7/20/2012 3:32:59 PM
Surr: 4-Bromofluorobenzene	80.4	70-130		%REC	1	7/20/2012 3:32:59 PM
Surr: Dibromofluoromethane	95.5	70-130		%REC	1	7/20/2012 3:32:59 PM
Surr: Toluene-d8	108	70-130		%REC	1	7/20/2012 3:32:59 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:30:00 PM
Lab ID: 1207922-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1200	200		mg/Kg	20	7/22/2012 12:05:33 AM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/22/2012 12:05:33 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/22/2012 12:05:33 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/26/2012 6:54:16 PM
Surr: BFB	101	84-116		%REC	10	7/26/2012 6:54:16 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.090	0.033		mg/Kg	1	8/3/2012 4:17:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	12		mg/Kg	5	8/10/2012 7:15:32 PM
Arsenic	ND	12		mg/Kg	5	8/10/2012 7:15:32 PM
Barium	500	5.0		mg/Kg	50	8/10/2012 7:17:59 PM
Beryllium	ND	0.75		mg/Kg	5	8/10/2012 7:15:32 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:15:32 PM
Chromium	10	1.5		mg/Kg	5	8/10/2012 7:15:32 PM
Cobalt	3.1	1.5		mg/Kg	5	8/10/2012 7:15:32 PM
Iron	8800	500		mg/Kg	500	8/10/2012 7:20:23 PM
Lead	1.9	1.2		mg/Kg	5	8/10/2012 7:15:32 PM
Manganese	930	5.0		mg/Kg	50	8/10/2012 7:17:59 PM
Nickel	5.9	2.5		mg/Kg	5	8/10/2012 7:15:32 PM
Selenium	ND	12		mg/Kg	5	8/10/2012 7:15:32 PM
Silver	ND	1.2		mg/Kg	5	8/10/2012 7:15:32 PM
Vanadium	19	12		mg/Kg	5	8/10/2012 7:15:32 PM
Zinc	28	12		mg/Kg	5	8/10/2012 7:15:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Acenaphthylene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Aniline	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Anthracene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Azobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:30:00 PM
Lab ID: 1207922-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Carbazole	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 10:54:46 AM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Chrysene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 10:54:46 AM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Dibenzofuran	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 10:54:46 AM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 10:54:46 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 10:54:46 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 10:54:46 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
Fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Fluorene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Hexachloroethane	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Naphthalene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:30:00 PM
Lab ID: 1207922-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 10:54:46 AM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 10:54:46 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 10:54:46 AM
Phenanthrene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Phenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Pyrene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Surr: 2,4,6-Tribromophenol	56.7	20.1-121		%REC	1	7/27/2012 10:54:46 AM
Surr: 2-Fluorobiphenyl	51.0	19-133		%REC	1	7/27/2012 10:54:46 AM
Surr: 2-Fluorophenol	46.7	20.2-108		%REC	1	7/27/2012 10:54:46 AM
Surr: 4-Terphenyl-d14	61.6	18.9-115		%REC	1	7/27/2012 10:54:46 AM
Surr: Nitrobenzene-d5	56.6	20.8-123		%REC	1	7/27/2012 10:54:46 AM
Surr: Phenol-d5	46.0	19.8-115		%REC	1	7/27/2012 10:54:46 AM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Toluene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Ethylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2,4-Trimethylbenzene	1.5	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Naphthalene	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	10	7/21/2012 12:18:50 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	10	7/21/2012 12:18:50 PM
Acetone	ND	7.5		mg/Kg	10	7/21/2012 12:18:50 PM
Bromobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Bromoform	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Bromomethane	ND	1.5		mg/Kg	10	7/21/2012 12:18:50 PM
2-Butanone	ND	5.0		mg/Kg	10	7/21/2012 12:18:50 PM
Carbon disulfide	ND	5.0		mg/Kg	10	7/21/2012 12:18:50 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
Chlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Chloroethane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:30:00 PM
Lab ID: 1207922-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Chloromethane	ND	1.5		mg/Kg	10	7/21/2012 12:18:50 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Dibromomethane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
2-Hexanone	ND	5.0		mg/Kg	10	7/21/2012 12:18:50 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	7/21/2012 12:18:50 PM
Methylene chloride	ND	1.5		mg/Kg	10	7/21/2012 12:18:50 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Styrene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:30:00 PM
Lab ID: 1207922-003
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Xylenes, Total	2.4	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	10	7/21/2012 12:18:50 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	10	7/21/2012 12:18:50 PM
Surr: Dibromofluoromethane	89.7	70-130		%REC	10	7/21/2012 12:18:50 PM
Surr: Toluene-d8	104	70-130		%REC	10	7/21/2012 12:18:50 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (4-6')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:40:00 PM
Lab ID: 1207922-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1800	98		mg/Kg	10	7/21/2012 8:25:23 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/21/2012 8:25:23 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/21/2012 8:25:23 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/26/2012 7:23:02 PM
Surr: BFB	109	84-116		%REC	20	7/26/2012 7:23:02 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:19:07 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 7:22:58 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 7:22:58 PM
Barium	200	0.50		mg/Kg	5	8/10/2012 7:22:58 PM
Beryllium	1.1	0.75		mg/Kg	5	8/10/2012 7:22:58 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:22:58 PM
Chromium	12	1.5		mg/Kg	5	8/10/2012 7:22:58 PM
Cobalt	4.9	1.5		mg/Kg	5	8/10/2012 7:22:58 PM
Iron	16000	500		mg/Kg	500	8/10/2012 7:27:49 PM
Lead	2.4	1.3		mg/Kg	5	8/10/2012 7:22:58 PM
Manganese	280	5.0		mg/Kg	50	8/10/2012 7:25:24 PM
Nickel	8.5	2.5		mg/Kg	5	8/10/2012 7:22:58 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 7:22:58 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 7:22:58 PM
Vanadium	20	13		mg/Kg	5	8/10/2012 7:22:58 PM
Zinc	17	13		mg/Kg	5	8/10/2012 7:22:58 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (4-6')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:40:00 PM
Lab ID: 1207922-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 11:24:15 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 11:24:15 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 11:24:15 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/27/2012 11:24:15 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 11:24:15 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/27/2012 11:24:15 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
1-Methylnaphthalene	5.1	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2-Methylnaphthalene	8.0	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Naphthalene	1.8	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (4-6')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:40:00 PM
Lab ID: 1207922-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/27/2012 11:24:15 AM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 11:24:15 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/27/2012 11:24:15 AM
Phenanthrene	1.1	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Phenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Pyrene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Surr: 2,4,6-Tribromophenol	104	20.1-121		%REC	1	7/27/2012 11:24:15 AM
Surr: 2-Fluorobiphenyl	94.3	19-133		%REC	1	7/27/2012 11:24:15 AM
Surr: 2-Fluorophenol	71.3	20.2-108		%REC	1	7/27/2012 11:24:15 AM
Surr: 4-Terphenyl-d14	95.3	18.9-115		%REC	1	7/27/2012 11:24:15 AM
Surr: Nitrobenzene-d5	94.3	20.8-123		%REC	1	7/27/2012 11:24:15 AM
Surr: Phenol-d5	102	19.8-115		%REC	1	7/27/2012 11:24:15 AM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	0.69	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Toluene	2.8	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Ethylbenzene	1.1	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2,4-Trimethylbenzene	3.2	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,3,5-Trimethylbenzene	0.92	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Naphthalene	1.1	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1-Methylnaphthalene	2.9	2.0		mg/Kg	10	7/21/2012 1:15:52 PM
2-Methylnaphthalene	4.7	2.0		mg/Kg	10	7/21/2012 1:15:52 PM
Acetone	ND	7.5		mg/Kg	10	7/21/2012 1:15:52 PM
Bromobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Bromoform	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Bromomethane	ND	1.5		mg/Kg	10	7/21/2012 1:15:52 PM
2-Butanone	ND	5.0		mg/Kg	10	7/21/2012 1:15:52 PM
Carbon disulfide	ND	5.0		mg/Kg	10	7/21/2012 1:15:52 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
Chlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Chloroethane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (4-6')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:40:00 PM
Lab ID: 1207922-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Chloromethane	ND	1.5		mg/Kg	10	7/21/2012 1:15:52 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Dibromomethane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
2-Hexanone	ND	5.0		mg/Kg	10	7/21/2012 1:15:52 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	7/21/2012 1:15:52 PM
Methylene chloride	ND	1.5		mg/Kg	10	7/21/2012 1:15:52 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Styrene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (4-6')
Project: SWMU NO.14
Collection Date: 7/18/2012 4:40:00 PM
Lab ID: 1207922-004
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Xylenes, Total	5.6	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%REC	10	7/21/2012 1:15:52 PM
Surr: 4-Bromofluorobenzene	85.3	70-130		%REC	10	7/21/2012 1:15:52 PM
Surr: Dibromofluoromethane	95.5	70-130		%REC	10	7/21/2012 1:15:52 PM
Surr: Toluene-d8	103	70-130		%REC	10	7/21/2012 1:15:52 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (13-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 5:00:00 PM
Lab ID: 1207922-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/21/2012 6:34:36 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/21/2012 6:34:36 PM
Surr: DNOP	117	77.6-140		%REC	1	7/21/2012 6:34:36 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/26/2012 7:51:46 PM
Surr: BFB	101	84-116		%REC	1	7/26/2012 7:51:46 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:20:55 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 7:30:27 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 7:30:27 PM
Barium	190	0.50		mg/Kg	5	8/10/2012 7:30:27 PM
Beryllium	1.3	0.75		mg/Kg	5	8/10/2012 7:30:27 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:30:27 PM
Chromium	19	1.5		mg/Kg	5	8/10/2012 7:30:27 PM
Cobalt	6.5	1.5		mg/Kg	5	8/10/2012 7:30:27 PM
Iron	23000	500		mg/Kg	500	8/10/2012 7:45:36 PM
Lead	ND	1.3		mg/Kg	5	8/10/2012 7:30:27 PM
Manganese	460	5.0		mg/Kg	50	8/10/2012 7:32:53 PM
Nickel	13	2.5		mg/Kg	5	8/10/2012 7:30:27 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 7:30:27 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 7:30:27 PM
Vanadium	29	13		mg/Kg	5	8/10/2012 7:30:27 PM
Zinc	27	13		mg/Kg	5	8/10/2012 7:30:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Acenaphthylene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Aniline	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Anthracene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Azobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzoic acid	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM

Qualifiers:

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Client Sample ID: SMWU 14-9 (13-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 5:00:00 PM
Lab ID: 1207922-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Carbazole	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/27/2012 11:53:38 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Chrysene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/27/2012 11:53:38 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Dibenzofuran	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/27/2012 11:53:38 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:53:38 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/27/2012 11:53:38 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/27/2012 11:53:38 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
Fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Fluorene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Hexachloroethane	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Isophorone	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2-Methylphenol	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Naphthalene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (13-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 5:00:00 PM
Lab ID: 1207922-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 11:53:38 AM
Nitrobenzene	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/27/2012 11:53:38 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:53:38 AM
Phenanthrene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Phenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Pyrene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Pyridine	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Surr: 2,4,6-Tribromophenol	90.0	20.1-121		%REC	1	7/27/2012 11:53:38 AM
Surr: 2-Fluorobiphenyl	79.1	19-133		%REC	1	7/27/2012 11:53:38 AM
Surr: 2-Fluorophenol	78.2	20.2-108		%REC	1	7/27/2012 11:53:38 AM
Surr: 4-Terphenyl-d14	82.5	18.9-115		%REC	1	7/27/2012 11:53:38 AM
Surr: Nitrobenzene-d5	80.4	20.8-123		%REC	1	7/27/2012 11:53:38 AM
Surr: Phenol-d5	80.3	19.8-115		%REC	1	7/27/2012 11:53:38 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Toluene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Ethylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Xylenes, Total	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Methyl tert-butyl ether (MTBE)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2,4-Trimethylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,3,5-Trimethylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dichloroethane (EDC)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dibromoethane (EDB)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Naphthalene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1-Methylnaphthalene	ND	4.56		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2-Methylnaphthalene	ND	4.56		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Acetone	ND	11.4		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Bromobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Bromodichloromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Bromoform	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2-Butanone	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Carbon tetrachloride	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Chlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Chloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Chloroform	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (13-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 5:00:00 PM
Lab ID: 1207922-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2-Chlorotoluene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Carbon disulfide	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
4-Chlorotoluene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
cis-1,2-DCE	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
cis-1,3-Dichloropropene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dibromo-3-chloropropane	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Dibromochloromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Dibromomethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,3-Dichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,4-Dichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Dichlorodifluoromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1-Dichloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1-Dichloroethene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dichloropropane	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,3-Dichloropropane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2,2-Dichloropropane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1-Dichloropropene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Hexachlorobutadiene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Isopropylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
4-Isopropyltoluene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Methylene chloride	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
n-Butylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2-Hexanone	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
n-Propylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
sec-Butylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Styrene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
4-Methyl-2-pentanone	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
tert-Butylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1,1,2-Tetrachloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1,2,2-Tetrachloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Tetrachloroethene (PCE)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
trans-1,2-DCE	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
trans-1,3-Dichloropropene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2,3-Trichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2,4-Trichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1,1-Trichloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1,2-Trichloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Trichloroethene (TCE)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Trichlorofluoromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2,3-Trichloropropane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-9 (13-14')
Project: SWMU NO.14
Collection Date: 7/18/2012 5:00:00 PM
Lab ID: 1207922-005
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	1	7/20/2012 5:34:03 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1	7/20/2012 5:34:03 PM
Surr: Dibromofluoromethane	89.3	70-130		%REC	1	7/20/2012 5:34:03 PM
Surr: Toluene-d8	101	70-130		%REC	1	7/20/2012 5:34:03 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:30:00 PM
Lab ID: 1207922-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	3900	200		mg/Kg	20	7/21/2012 9:31:35 PM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/21/2012 9:31:35 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 9:31:35 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/26/2012 8:20:29 PM
Surr: BFB	102	84-116		%REC	50	7/26/2012 8:20:29 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:26:17 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 7:48:14 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 7:48:14 PM
Barium	650	5.0		mg/Kg	50	8/10/2012 7:50:38 PM
Beryllium	0.76	0.75		mg/Kg	5	8/10/2012 7:48:14 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:48:14 PM
Chromium	9.6	1.5		mg/Kg	5	8/10/2012 7:48:14 PM
Cobalt	4.1	1.5		mg/Kg	5	8/10/2012 7:48:14 PM
Iron	15000	500		mg/Kg	500	8/10/2012 7:53:02 PM
Lead	3.5	1.3		mg/Kg	5	8/10/2012 7:48:14 PM
Manganese	600	5.0		mg/Kg	50	8/10/2012 7:50:38 PM
Nickel	6.8	2.5		mg/Kg	5	8/10/2012 7:48:14 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 7:48:14 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 7:48:14 PM
Vanadium	22	13		mg/Kg	5	8/10/2012 7:48:14 PM
Zinc	30	13		mg/Kg	5	8/10/2012 7:48:14 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:30:00 PM
Lab ID: 1207922-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/27/2012 12:23:05 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/27/2012 12:23:05 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/27/2012 12:23:05 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 12:23:05 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:30:00 PM
Lab ID: 1207922-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 12:23:05 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/27/2012 12:23:05 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 12:23:05 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Surr: 2,4,6-Tribromophenol	116	20.1-121		%REC	1	7/27/2012 12:23:05 PM
Surr: 2-Fluorobiphenyl	96.1	19-133		%REC	1	7/27/2012 12:23:05 PM
Surr: 2-Fluorophenol	107	20.2-108		%REC	1	7/27/2012 12:23:05 PM
Surr: 4-Terphenyl-d14	113	18.9-115		%REC	1	7/27/2012 12:23:05 PM
Surr: Nitrobenzene-d5	125	20.8-123	S	%REC	1	7/27/2012 12:23:05 PM
Surr: Phenol-d5	106	19.8-115		%REC	1	7/27/2012 12:23:05 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Ethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2,4-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Naphthalene	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1-Methylnaphthalene	ND	4.0		mg/Kg	20	7/23/2012 8:18:11 PM
2-Methylnaphthalene	ND	4.0		mg/Kg	20	7/23/2012 8:18:11 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 8:18:11 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 8:18:11 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 8:18:11 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 8:18:11 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:30:00 PM
Lab ID: 1207922-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 8:18:11 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 8:18:11 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 8:18:11 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 8:18:11 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:30:00 PM
Lab ID: 1207922-006
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	20	7/23/2012 8:18:11 PM
Surr: 4-Bromofluorobenzene	77.1	70-130		%REC	20	7/23/2012 8:18:11 PM
Surr: Dibromofluoromethane	99.6	70-130		%REC	20	7/23/2012 8:18:11 PM
Surr: Toluene-d8	100	70-130		%REC	20	7/23/2012 8:18:11 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:50:00 PM
Lab ID: 1207922-007
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	2100	97		mg/Kg	10	7/21/2012 8:47:31 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/21/2012 8:47:31 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/21/2012 8:47:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/26/2012 8:49:13 PM
Surr: BFB	111	84-116		%REC	10	7/26/2012 8:49:13 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:28:08 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 7:55:37 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 7:55:37 PM
Barium	550	5.0		mg/Kg	50	8/10/2012 7:58:01 PM
Beryllium	ND	0.75		mg/Kg	5	8/10/2012 7:55:37 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:55:37 PM
Chromium	7.1	1.5		mg/Kg	5	8/10/2012 7:55:37 PM
Cobalt	3.7	1.5		mg/Kg	5	8/10/2012 7:55:37 PM
Iron	11000	500		mg/Kg	500	8/10/2012 8:00:26 PM
Lead	3.2	1.3		mg/Kg	5	8/10/2012 7:55:37 PM
Manganese	1100	5.0		mg/Kg	50	8/10/2012 7:58:01 PM
Nickel	5.6	2.5		mg/Kg	5	8/10/2012 7:55:37 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 7:55:37 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 7:55:37 PM
Vanadium	18	13		mg/Kg	5	8/10/2012 7:55:37 PM
Zinc	ND	13		mg/Kg	5	8/10/2012 7:55:37 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207922-007 **Matrix:** SOIL

Client Sample ID: SMWU 14-7 (1.5-2')
Collection Date: 7/18/2012 6:50:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 12:52:32 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 12:52:32 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 12:52:32 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	7/27/2012 12:52:32 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 12:52:32 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	7/27/2012 12:52:32 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Naphthalene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:50:00 PM
Lab ID: 1207922-007
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
4-Nitroaniline	ND	0.81		mg/Kg	1	7/27/2012 12:52:32 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 12:52:32 PM
Pentachlorophenol	ND	0.81		mg/Kg	1	7/27/2012 12:52:32 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Phenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Pyrene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Surr: 2,4,6-Tribromophenol	44.6	20.1-121		%REC	1	7/27/2012 12:52:32 PM
Surr: 2-Fluorobiphenyl	39.7	19-133		%REC	1	7/27/2012 12:52:32 PM
Surr: 2-Fluorophenol	40.4	20.2-108		%REC	1	7/27/2012 12:52:32 PM
Surr: 4-Terphenyl-d14	44.0	18.9-115		%REC	1	7/27/2012 12:52:32 PM
Surr: Nitrobenzene-d5	43.0	20.8-123		%REC	1	7/27/2012 12:52:32 PM
Surr: Phenol-d5	37.9	19.8-115		%REC	1	7/27/2012 12:52:32 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	12.6	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Toluene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Ethylbenzene	6.91	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Xylenes, Total	7.95	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Methyl tert-butyl ether (MTBE)	10.2	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2,4-Trimethylbenzene	5.62	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,3,5-Trimethylbenzene	4.87	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dichloroethane (EDC)	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dibromoethane (EDB)	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Naphthalene	2.18	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1-Methylnaphthalene	5.02	3.59		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2-Methylnaphthalene	4.02	3.59		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Acetone	ND	8.98		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Bromobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Bromodichloromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Bromoform	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2-Butanone	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Carbon tetrachloride	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Chlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Chloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Chloroform	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:50:00 PM
Lab ID: 1207922-007
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2-Chlorotoluene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Carbon disulfide	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
4-Chlorotoluene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
cis-1,2-DCE	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
cis-1,3-Dichloropropene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dibromo-3-chloropropane	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Dibromochloromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Dibromomethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,3-Dichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,4-Dichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Dichlorodifluoromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1-Dichloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1-Dichloroethene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dichloropropane	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,3-Dichloropropane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2,2-Dichloropropane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1-Dichloropropene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Hexachlorobutadiene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Isopropylbenzene	2.08	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
4-Isopropyltoluene	1.70	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Methylene chloride	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
n-Butylbenzene	1.16	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2-Hexanone	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
n-Propylbenzene	2.57	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
sec-Butylbenzene	2.03	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Styrene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
4-Methyl-2-pentanone	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
tert-Butylbenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1,1,2-Tetrachloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1,2,2-Tetrachloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Tetrachloroethene (PCE)	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
trans-1,2-DCE	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
trans-1,3-Dichloropropene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2,3-Trichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2,4-Trichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1,1-Trichloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1,2-Trichloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Trichloroethene (TCE)	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Trichlorofluoromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2,3-Trichloropropane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (1.5-2')
Project: SWMU NO.14
Collection Date: 7/18/2012 6:50:00 PM
Lab ID: 1207922-007
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Surr: 1,2-Dichloroethane-d4	108	70-130		%REC	1	7/20/2012 6:34:19 PM
Surr: 4-Bromofluorobenzene	130	70-130	S	%REC	1	7/20/2012 6:34:19 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	7/20/2012 6:34:19 PM
Surr: Toluene-d8	93.1	70-130		%REC	1	7/20/2012 6:34:19 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (6-8')
Project: SWMU NO.14
Collection Date: 7/18/2012 7:10:00 PM
Lab ID: 1207922-008
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1000	100		mg/Kg	10	7/21/2012 9:09:30 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	7/21/2012 9:09:30 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/21/2012 9:09:30 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	150	50		mg/Kg	10	7/27/2012 1:36:24 AM
Surr: BFB	187	84-116	S	%REC	10	7/27/2012 1:36:24 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:29:56 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 8:03:02 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 8:03:02 PM
Barium	2400	5.0		mg/Kg	50	8/10/2012 8:05:24 PM
Beryllium	1.2	0.75		mg/Kg	5	8/10/2012 8:03:02 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 8:03:02 PM
Chromium	14	1.5		mg/Kg	5	8/10/2012 8:03:02 PM
Cobalt	6.0	1.5		mg/Kg	5	8/10/2012 8:03:02 PM
Iron	20000	500		mg/Kg	500	8/10/2012 8:07:51 PM
Lead	2.6	1.3		mg/Kg	5	8/10/2012 8:03:02 PM
Manganese	400	5.0		mg/Kg	50	8/10/2012 8:05:24 PM
Nickel	11	2.5		mg/Kg	5	8/10/2012 8:03:02 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 8:03:02 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 8:03:02 PM
Vanadium	27	13		mg/Kg	5	8/10/2012 8:03:02 PM
Zinc	22	13		mg/Kg	5	8/10/2012 8:03:02 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (6-8')
Project: SWMU NO.14
Collection Date: 7/18/2012 7:10:00 PM
Lab ID: 1207922-008
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 2:20:48 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 2:20:48 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 2:20:48 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/27/2012 2:20:48 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 2:20:48 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/27/2012 2:20:48 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
1-Methylnaphthalene	6.5	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2-Methylnaphthalene	9.2	2.0		mg/Kg	5	7/30/2012 4:35:23 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Naphthalene	2.2	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (6-8')
Project: SWMU NO.14
Collection Date: 7/18/2012 7:10:00 PM
Lab ID: 1207922-008
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/27/2012 2:20:48 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 2:20:48 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/27/2012 2:20:48 PM
Phenanthrene	2.0	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Phenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Pyrene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Surr: 2,4,6-Tribromophenol	71.5	20.1-121		%REC	1	7/27/2012 2:20:48 PM
Surr: 2-Fluorobiphenyl	64.8	19-133		%REC	1	7/27/2012 2:20:48 PM
Surr: 2-Fluorophenol	70.7	20.2-108		%REC	1	7/27/2012 2:20:48 PM
Surr: 4-Terphenyl-d14	84.2	18.9-115		%REC	1	7/27/2012 2:20:48 PM
Surr: Nitrobenzene-d5	85.1	20.8-123		%REC	1	7/27/2012 2:20:48 PM
Surr: Phenol-d5	79.9	19.8-115		%REC	1	7/27/2012 2:20:48 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Ethylbenzene	3.1	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2,4-Trimethylbenzene	12	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,3,5-Trimethylbenzene	1.7	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Naphthalene	3.9	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1-Methylnaphthalene	7.2	4.0		mg/Kg	20	7/23/2012 9:14:46 PM
2-Methylnaphthalene	12	4.0		mg/Kg	20	7/23/2012 9:14:46 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 9:14:46 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 9:14:46 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 9:14:46 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 9:14:46 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (6-8')
Project: SWMU NO.14
Collection Date: 7/18/2012 7:10:00 PM
Lab ID: 1207922-008
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 9:14:46 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 9:14:46 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 9:14:46 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 9:14:46 PM
n-Butylbenzene	1.6	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
n-Propylbenzene	2.0	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (6-8')
Project: SWMU NO.14
Collection Date: 7/18/2012 7:10:00 PM
Lab ID: 1207922-008
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Xylenes, Total	8.1	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	20	7/23/2012 9:14:46 PM
Surr: 4-Bromofluorobenzene	77.4	70-130		%REC	20	7/23/2012 9:14:46 PM
Surr: Dibromofluoromethane	106	70-130		%REC	20	7/23/2012 9:14:46 PM
Surr: Toluene-d8	102	70-130		%REC	20	7/23/2012 9:14:46 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207922-009 **Matrix:** SOIL

Client Sample ID: SMWU 14-7 (23.5-24')
Collection Date: 7/18/2012 7:20:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/21/2012 6:56:50 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/21/2012 6:56:50 PM
Surr: DNOP	115	77.6-140		%REC	1	7/21/2012 6:56:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/27/2012 2:05:10 AM
Surr: BFB	107	84-116		%REC	1	7/27/2012 2:05:10 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:31:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	13		mg/Kg	5	8/10/2012 8:22:31 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 8:22:31 PM
Barium	350	5.0		mg/Kg	50	8/10/2012 8:24:57 PM
Beryllium	1.2	0.75		mg/Kg	5	8/10/2012 8:22:31 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 8:22:31 PM
Chromium	17	1.5		mg/Kg	5	8/10/2012 8:22:31 PM
Cobalt	7.6	1.5		mg/Kg	5	8/10/2012 8:22:31 PM
Iron	21000	500		mg/Kg	500	8/22/2012 7:45:41 AM
Lead	ND	1.3		mg/Kg	5	8/10/2012 8:22:31 PM
Manganese	740	5.0		mg/Kg	50	8/10/2012 8:24:57 PM
Nickel	16	2.5		mg/Kg	5	8/10/2012 8:22:31 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 8:22:31 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 8:22:31 PM
Vanadium	16	13		mg/Kg	5	8/10/2012 8:22:31 PM
Zinc	25	13		mg/Kg	5	8/10/2012 8:22:31 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Aniline	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Anthracene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Azobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207922-009 **Matrix:** SOIL

Client Sample ID: SMWU 14-7 (23.5-24')
Collection Date: 7/18/2012 7:20:00 PM
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Carbazole	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/27/2012 3:49:13 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Chrysene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/27/2012 3:49:13 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/27/2012 3:49:13 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 3:49:13 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/27/2012 3:49:13 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/27/2012 3:49:13 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Fluorene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Isophorone	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Naphthalene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (23.5-24')
Project: SWMU NO.14
Collection Date: 7/18/2012 7:20:00 PM
Lab ID: 1207922-009 **Matrix:** SOIL **Received Date:** 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 3:49:13 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/27/2012 3:49:13 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/27/2012 3:49:13 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Phenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Pyrene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Pyridine	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Surr: 2,4,6-Tribromophenol	71.0	20.1-121		%REC	1	7/27/2012 3:49:13 PM
Surr: 2-Fluorobiphenyl	60.0	19-133		%REC	1	7/27/2012 3:49:13 PM
Surr: 2-Fluorophenol	54.8	20.2-108		%REC	1	7/27/2012 3:49:13 PM
Surr: 4-Terphenyl-d14	68.7	18.9-115		%REC	1	7/27/2012 3:49:13 PM
Surr: Nitrobenzene-d5	55.0	20.8-123		%REC	1	7/27/2012 3:49:13 PM
Surr: Phenol-d5	58.5	19.8-115		%REC	1	7/27/2012 3:49:13 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Toluene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Ethylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Xylenes, Total	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dibromoethane (EDB)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Naphthalene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1-Methylnaphthalene	ND	4.02		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2-Methylnaphthalene	ND	4.02		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Acetone	ND	10.0		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Bromobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Bromodichloromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Bromoform	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2-Butanone	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Carbon tetrachloride	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Chlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Chloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Chloroform	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (23.5-24')
Project: SWMU NO.14
Collection Date: 7/18/2012 7:20:00 PM
Lab ID: 1207922-009
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2-Chlorotoluene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Carbon disulfide	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
4-Chlorotoluene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
cis-1,2-DCE	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
cis-1,3-Dichloropropene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dibromo-3-chloropropane	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Dibromochloromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Dibromomethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,3-Dichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,4-Dichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Dichlorodifluoromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1-Dichloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1-Dichloroethene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dichloropropane	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,3-Dichloropropane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2,2-Dichloropropane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1-Dichloropropene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Hexachlorobutadiene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Isopropylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
4-Isopropyltoluene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Methylene chloride	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
n-Butylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2-Hexanone	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
n-Propylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
sec-Butylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Styrene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
4-Methyl-2-pentanone	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
tert-Butylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Tetrachloroethene (PCE)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
trans-1,2-DCE	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
trans-1,3-Dichloropropene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1,1-Trichloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1,2-Trichloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Trichloroethene (TCE)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Trichlorofluoromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2,3-Trichloropropane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SMWU 14-7 (23.5-24')
Project: SWMU NO.14
Collection Date: 7/18/2012 7:20:00 PM
Lab ID: 1207922-009
Matrix: SOIL
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	7/20/2012 8:04:07 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	1	7/20/2012 8:04:07 PM
Surr: Dibromofluoromethane	90.0	70-130		%REC	1	7/20/2012 8:04:07 PM
Surr: Toluene-d8	100	70-130		%REC	1	7/20/2012 8:04:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 7:45:00 PM
Lab ID: 1207922-010
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 7:25:44 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 7:25:44 PM
Surr: DNOP	127	79.5-166		%REC	1	7/23/2012 7:25:44 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/25/2012 12:38:13 AM
Surr: BFB	94.7	69.8-119		%REC	1	7/25/2012 12:38:13 AM
EPA METHOD 200.7: METALS						Analyst: **JLF**
Barium	ND	0.0020		mg/L	1	8/17/2012 12:49:03 PM
Beryllium	ND	0.0020		mg/L	1	8/17/2012 12:49:03 PM
Cadmium	ND	0.0020		mg/L	1	8/17/2012 12:49:03 PM
Chromium	ND	0.0060		mg/L	1	8/20/2012 11:03:35 AM
Cobalt	ND	0.0060		mg/L	1	8/17/2012 12:49:03 PM
Iron	ND	0.020		mg/L	1	8/17/2012 12:49:03 PM
Manganese	ND	0.0020		mg/L	1	8/17/2012 12:49:03 PM
Nickel	ND	0.010		mg/L	1	8/20/2012 11:03:35 AM
Silver	ND	0.0050		mg/L	1	8/17/2012 12:49:03 PM
Vanadium	ND	0.050		mg/L	1	8/17/2012 12:49:03 PM
Zinc	ND	0.010		mg/L	1	8/20/2012 11:03:35 AM
EPA 200.8: METALS						Analyst: **SNV**
Antimony	ND	0.0010		mg/L	1	7/31/2012 6:44:16 PM
Arsenic	ND	0.0010		mg/L	1	7/31/2012 6:44:16 PM
Lead	ND	0.0010		mg/L	1	7/31/2012 6:44:16 PM
Selenium	ND	0.0010		mg/L	1	7/31/2012 6:44:16 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	7/24/2012 11:01:25 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Aniline	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Anthracene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 1:15:31 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 1:15:31 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 7:45:00 PM
Lab ID: 1207922-010
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Carbazole	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Chrysene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 1:15:31 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 1:15:31 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 1:15:31 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Fluorene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Isophorone	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 1:15:31 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 1:15:31 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 7:45:00 PM
Lab ID: 1207922-010
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 1:15:31 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 1:15:31 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 1:15:31 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Phenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Pyrene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Pyridine	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Surr: 2,4,6-Tribromophenol	52.7	44.2-126		%REC	1	7/25/2012 1:15:31 PM
Surr: 2-Fluorobiphenyl	51.7	37-114		%REC	1	7/25/2012 1:15:31 PM
Surr: 2-Fluorophenol	28.7	23.4-98		%REC	1	7/25/2012 1:15:31 PM
Surr: 4-Terphenyl-d14	68.2	41.3-116		%REC	1	7/25/2012 1:15:31 PM
Surr: Nitrobenzene-d5	51.5	39.5-118		%REC	1	7/25/2012 1:15:31 PM
Surr: Phenol-d5	29.2	20.9-95.9		%REC	1	7/25/2012 1:15:31 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Toluene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Ethylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Naphthalene	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 12:54:27 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 12:54:27 AM
Acetone	ND	10		µg/L	1	7/25/2012 12:54:27 AM
Bromobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Bromoform	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Bromomethane	ND	3.0		µg/L	1	7/25/2012 12:54:27 AM
2-Butanone	ND	10		µg/L	1	7/25/2012 12:54:27 AM
Carbon disulfide	ND	10		µg/L	1	7/25/2012 12:54:27 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 7:45:00 PM
Lab ID: 1207922-010
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Carbon Tetrachloride	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Chlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Chloroethane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
Chloroform	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Chloromethane	ND	3.0		µg/L	1	7/25/2012 12:54:27 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Dibromomethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
2-Hexanone	ND	10		µg/L	1	7/25/2012 12:54:27 AM
Isopropylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/25/2012 12:54:27 AM
Methylene Chloride	ND	3.0		µg/L	1	7/25/2012 12:54:27 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Styrene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071812
Project: SWMU NO.14
Collection Date: 7/18/2012 7:45:00 PM
Lab ID: 1207922-010
Matrix: AQUEOUS
Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
Vinyl chloride	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Xylenes, Total	ND	1.5		µg/L	1	7/25/2012 12:54:27 AM
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%REC	1	7/25/2012 12:54:27 AM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	7/25/2012 12:54:27 AM
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/25/2012 12:54:27 AM
Surr: Toluene-d8	105	70-130		%REC	1	7/25/2012 12:54:27 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724076
Project Name: 1207922

Analytical Results Report

Sample Number 120724076-001 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-001D / SMW 14-9 (0-0.5) **Sampling Time** 4:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	4.4	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724076-002 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-002D / SMW 14-9 (0-0.5) DUP **Sampling Time** 4:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.04	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	3.6	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724076-003 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-003D / SMW 14-9 (1.5-2) **Sampling Time** 4:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	13.3	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724076-004 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-004D / SMW 14-9 (4-6) **Sampling Time** 4:40 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	17.8	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724076
Project Name: 1207922

Analytical Results Report

Sample Number 120724076-005 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-005D / SMW 14-9 (13-14) **Sampling Time** 5:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	16.9	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724076-006 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-006D / SMW 14-7 (0-0.5) **Sampling Time** 6:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	10.3	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724076-007 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-007D / SMW 14-7 (1.5-2) **Sampling Time** 6:50 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	12.4	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724076-008 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-008D / SMW 14-7 (6-8) **Sampling Time** 7:10 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	16.1	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724076
Project Name: 1207922

Analytical Results Report

Sample Number 120724076-009 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-009D / SMW 14-7 (23.5-24) **Sampling Time** 7:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	11.4	Percent		7/31/2012	CRW	%moisture	

Sample Number 120724076-010 **Sampling Date** 7/18/2012 **Date/Time Received** 7/24/2012 1:00 PM
Client Sample ID 1207922-010F / EB071812 **Sampling Time** 7:45 PM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139688** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139689** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0.0005000	98.2	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.6	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Silver	0.097	0.0050	0.1000	0	96.9	85	115			
Vanadium	0.50	0.050	0.5000	0	101	85	115			

Sample ID **1207807-002BMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139709** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.60	0.0020	0.5000	0.08916	102	70	130			

Sample ID **1207807-002BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4938** RunNo: **4938**
Prep Date: Analysis Date: **8/17/2012** SeqNo: **139710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.59	0.0020	0.5000	0.08916	99.9	70	130	1.42	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Nickel	ND	0.010								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140608** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.0	85	115			
Nickel	0.46	0.010	0.5000	0	92.5	85	115			
Zinc	0.48	0.010	0.5000	0	95.6	85	115			

Sample ID **1207B81-004AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140624** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.3	70	130			
Nickel	0.44	0.010	0.5000	0	88.9	70	130			
Zinc	0.47	0.010	0.5000	0.009760	92.7	70	130			

Sample ID **1207B81-004AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4970** RunNo: **4970**
Prep Date: Analysis Date: **8/20/2012** SeqNo: **140625** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.5	70	130	0.186	20	
Nickel	0.44	0.010	0.5000	0	88.8	70	130	0.0540	20	
Zinc	0.47	0.010	0.5000	0.009760	92.2	70	130	0.517	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207508-003AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128501** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.033	0.0010	0.02500	0.008736	97.7	70	130			

Sample ID **1207608-004AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128507** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	70	130			
Arsenic	0.025	0.0010	0.02500	0	99.9	70	130			
Selenium	0.025	0.0010	0.02500	0	102	70	130			

Sample ID **1207806-004AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128522** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	70	130			
Arsenic	0.025	0.0010	0.02500	0	100	70	130			
Selenium	0.029	0.0010	0.02500	0.004090	98.9	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128780** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.028	0.0010	0.02500	0	112	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R4578** RunNo: **4578**
Prep Date: Analysis Date: **7/31/2012** SeqNo: **128781** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.024	0.0010	0.02500	0	97.4	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Metals**		
Client ID: **PBW**	Batch ID: **R4578**	RunNo: **4578**		
Prep Date:	Analysis Date: **7/31/2012**	SeqNo: **128782**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Metals**		
Client ID: **PBW**	Batch ID: **R4578**	RunNo: **4578**		
Prep Date:	Analysis Date: **7/31/2012**	SeqNo: **128784**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2980** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **2980** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122215** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-2980** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **2980** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122216** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.7	80	120			

Sample ID **1207906-001BMS** SampType: **MS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **2980** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122218** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.1	75	125			

Sample ID **1207906-001BMSD** SampType: **MSD** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **2980** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122219** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.4	75	125	0.305	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2936** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **2936** RunNo: **4208**
Prep Date: **7/20/2012** Analysis Date: **7/21/2012** SeqNo: **120444** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		117	77.6	140			

Sample ID **LCS-2936** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **2936** RunNo: **4208**
Prep Date: **7/20/2012** Analysis Date: **7/21/2012** SeqNo: **120445** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.5	52.6	130			
Surr: DNOP	4.6		5.000		91.7	77.6	140			

Sample ID **MB-2946** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120621** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	77.6	140			

Sample ID **MB-2947** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **2947** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120622** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		111	77.6	140			

Sample ID **LCS-2946** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120623** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.5	77.6	140			

Sample ID **LCS-2947** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **2947** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120624** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.1	77.6	140			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**1207838-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8015B: Diesel Range Organics**
Client ID:	**BatchQC**	Batch ID:	**2946**	RunNo:	**4221**
Prep Date:	**7/21/2012**	Analysis Date:	**7/22/2012**	SeqNo:	**120626** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		4.873		89.6	77.6	140			

Sample ID	**1207838-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015B: Diesel Range Organics**
Client ID:	**BatchQC**	Batch ID:	**2946**	RunNo:	**4221**
Prep Date:	**7/21/2012**	Analysis Date:	**7/22/2012**	SeqNo:	**120627** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		4.955		88.1	77.6	140	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**MB-2965**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Diesel Range**						
Client ID:	**PBW**	Batch ID:	**2965**	RunNo:	**4229**						
Prep Date:	**7/23/2012**	Analysis Date:	**7/23/2012**	SeqNo:	**121391**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		ND	1.0								
Motor Oil Range Organics (MRO)		ND	5.0								
Surr: DNOP		1.2		1.000		123	79.5	166			

Sample ID	**LCS-2965**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range**						
Client ID:	**LCSW**	Batch ID:	**2965**	RunNo:	**4229**						
Prep Date:	**7/23/2012**	Analysis Date:	**7/23/2012**	SeqNo:	**121392**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		5.0	1.0	5.000	0	99.0	74	157			
Surr: DNOP		0.51		0.5000		102	79.5	166			

Sample ID	**LCSD-2965**	SampType:	**LCSD**	TestCode:	**EPA Method 8015B: Diesel Range**						
Client ID:	**LCSS02**	Batch ID:	**2965**	RunNo:	**4229**						
Prep Date:	**7/23/2012**	Analysis Date:	**7/23/2012**	SeqNo:	**121393**	Units:	**mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		5.0	1.0	5.000	0	99.9	74	157	0.931	23	
Surr: DNOP		0.53		0.5000		106	79.5	166	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3010** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3010** RunNo: **4444**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124694** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		99.6	84	116			

Sample ID **LCS-3010** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3010** RunNo: **4444**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124695** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	85	115			
Surr: BFB	1100		1000		108	84	116			

Sample ID **1207A15-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3010** RunNo: **4444**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124697** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.61	3.490	84.9	70	130			
Surr: BFB	1100		944.3		112	84	116			

Sample ID **1207A15-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3010** RunNo: **4444**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124698** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.58	3.490	83.3	70	130	1.63	22.1	
Surr: BFB	1100		943.4		113	84	116	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122827** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.5	69.8	119			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122828** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	75.9	119			
Surr: BFB	21		20.00		103	69.8	119			

Sample ID **1207819-004AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122835** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.7	0.25	2.500	2.307	94.7	75.4	121			
Surr: BFB	100		100.0		103	69.8	119			

Sample ID **1207819-004AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122836** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.1	0.25	2.500	2.307	71.5	75.4	121	13.2	10.5	SR
Surr: BFB	96		100.0		96.5	69.8	119	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R4233**	RunNo: **4233**	
Prep Date:	Analysis Date: **7/21/2012**	SeqNo: **121267**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b5** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	107	70.7	123			
Toluene	1.1	0.050	1.000	0	107	80	120			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	99.0	63.1	148			
Trichloroethene (TCE)	0.89	0.050	1.000	0	88.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		121	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		89.3	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID **1207900-002b ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.6439	0.006767	108	81.3	119			
Toluene	0.65	0.050	0.6439	0	100	75	121			
Chlorobenzene	0.64	0.050	0.6439	0	99.6	78.5	120			
1,1-Dichloroethene	0.68	0.050	0.6439	0	106	75.3	115			
Trichloroethene (TCE)	0.61	0.050	0.6439	0	94.7	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		97.6	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3220		97.9	70	130			
Surr: Dibromofluoromethane	0.32		0.3220		98.8	70	130			
Surr: Toluene-d8	0.32		0.3220		101	70	130			

Sample ID **1207900-002b msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121270** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6439	0.006767	103	81.3	119	4.25	15.7	
Toluene	0.63	0.050	0.6439	0	98.3	75	121	2.14	16.2	
Chlorobenzene	0.65	0.050	0.6439	0	101	78.5	120	1.27	14.9	
1,1-Dichloroethene	0.60	0.050	0.6439	0	93.7	75.3	115	12.0	31.8	
Trichloroethene (TCE)	0.55	0.050	0.6439	0	85.7	67.8	119	10.0	16.5	
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.3220		97.7	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3220		92.3	70	130	0	0	
Surr: Toluene-d8	0.32		0.3220		100	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R4379**	RunNo: **4379**	
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **122014**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	105	70.7	123			
Toluene	0.96	0.050	1.000	0	95.5	80	120			
Chlorobenzene	0.98	0.050	1.000	0	97.9	70	130			
1,1-Dichloroethene	0.93	0.050	1.000	0	92.5	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207940-007b ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122016** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	44	2.5	42.92	2.856	95.9	81.3	119			
Toluene	56	2.5	42.92	14.08	97.1	75	121			
Chlorobenzene	42	2.5	42.92	0	97.1	78.5	120			
1,1-Dichloroethene	39	2.5	42.92	0	91.6	75.3	115			
Trichloroethene (TCE)	37	2.5	42.92	0	85.1	67.8	119			
Surr: 1,2-Dichloroethane-d4	20		21.46		92.0	70	130			
Surr: 4-Bromofluorobenzene	20		21.46		93.8	70	130			
Surr: Dibromofluoromethane	22		21.46		101	70	130			
Surr: Toluene-d8	22		21.46		102	70	130			

Sample ID **1207940-007b msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122017** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	42.92	2.856	93.9	81.3	119	1.96	15.7	
Toluene	54	2.5	42.92	14.08	92.6	75	121	3.49	16.2	
Chlorobenzene	42	2.5	42.92	0	97.0	78.5	120	0.0484	14.9	
1,1-Dichloroethene	37	2.5	42.92	0	85.4	75.3	115	7.02	31.8	
Trichloroethene (TCE)	36	2.5	42.92	0	84.2	67.8	119	1.08	16.5	
Surr: 1,2-Dichloroethane-d4	20		21.46		94.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	20		21.46		92.2	70	130	0	0	
Surr: Dibromofluoromethane	23		21.46		106	70	130	0	0	
Surr: Toluene-d8	21		21.46		99.9	70	130	0	0	

Sample ID **mb-3010** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **3010** RunNo: **4468**
Prep Date: **7/24/2012** Analysis Date: **7/25/2012** SeqNo: **125366** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.0	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID **lcs-3010** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **3010** RunNo: **4468**
Prep Date: **7/24/2012** Analysis Date: **7/25/2012** SeqNo: **125367** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-3010** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **3010** RunNo: **4468**
Prep Date: **7/24/2012** Analysis Date: **7/25/2012** SeqNo: **125367** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID **mb-3010** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **3010** RunNo: **4498**
Prep Date: **7/24/2012** Analysis Date: **7/27/2012** SeqNo: **126123** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.7	70	130			
Surr: 4-Bromofluorobenzene	0.59		0.5000		118	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		99.3	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2930**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **2930**	RunNo: **4215**			
Prep Date: **7/20/2012**	Analysis Date: **7/20/2012**	SeqNo: **120455**	Units: **µg/Kg-dry**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.00								
Toluene	ND	1.00								
Ethylbenzene	ND	1.00								
Xylenes, Total	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	1.00								
1,2,4-Trimethylbenzene	ND	1.00								
1,3,5-Trimethylbenzene	ND	1.00								
1,2-Dichloroethane (EDC)	ND	1.00								
1,2-Dibromoethane (EDB)	ND	1.00								
Naphthalene	ND	1.00								
1-Methylnaphthalene	ND	4.00								
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	1.00								
Bromodichloromethane	ND	1.00								
Bromoform	ND	1.00								
2-Butanone	ND	2.00								
Carbon tetrachloride	ND	1.00								
Chlorobenzene	ND	1.00								
Chloroethane	ND	1.00								
Chloroform	ND	1.00								
Chloromethane	ND	1.00								
2-Chlorotoluene	ND	1.00								
Carbon disulfide	ND	2.00								
4-Chlorotoluene	ND	1.00								
cis-1,2-DCE	ND	1.00								
cis-1,3-Dichloropropene	ND	1.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	1.00								
Dibromomethane	ND	1.00								
1,2-Dichlorobenzene	ND	1.00								
1,3-Dichlorobenzene	ND	1.00								
1,4-Dichlorobenzene	ND	1.00								
Dichlorodifluoromethane	ND	1.00								
1,1-Dichloroethane	ND	1.00								
1,1-Dichloroethene	ND	1.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	1.00								
2,2-Dichloropropane	ND	1.00								
1,1-Dichloropropene	ND	1.00								
Hexachlorobutadiene	ND	1.00								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2930** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **2930** RunNo: **4215**
Prep Date: **7/20/2012** Analysis Date: **7/20/2012** SeqNo: **120455** Units: **µg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.00								
4-Isopropyltoluene	ND	1.00								
Methylene chloride	ND	2.00								
n-Butylbenzene	ND	1.00								
2-Hexanone	ND	2.00								
n-Propylbenzene	ND	1.00								
sec-Butylbenzene	ND	1.00								
Styrene	ND	1.00								
4-Methyl-2-pentanone	ND	2.00								
tert-Butylbenzene	ND	1.00								
1,1,1,2-Tetrachloroethane	ND	1.00								
1,1,2,2-Tetrachloroethane	ND	1.00								
Tetrachloroethene (PCE)	ND	1.00								
trans-1,2-DCE	ND	1.00								
trans-1,3-Dichloropropene	ND	1.00								
1,2,3-Trichlorobenzene	ND	1.00								
1,2,4-Trichlorobenzene	ND	1.00								
1,1,1-Trichloroethane	ND	1.00								
1,1,2-Trichloroethane	ND	1.00								
Trichloroethene (TCE)	ND	1.00								
Trichlorofluoromethane	ND	1.00								
1,2,3-Trichloropropane	ND	1.00								
Vinyl chloride	ND	1.00								
Surr: 1,2-Dichloroethane-d4	52.9		50.00		106	70	130			
Surr: 4-Bromofluorobenzene	48.7		50.00		97.4	70	130			
Surr: Dibromofluoromethane	46.6		50.00		93.2	70	130			
Surr: Toluene-d8	50.9		50.00		102	70	130			

Sample ID **lcs-2930** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **2930** RunNo: **4215**
Prep Date: **7/20/2012** Analysis Date: **7/20/2012** SeqNo: **120456** Units: **µg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.0	1.00	10.00	0	110	60	140			
Toluene	10.6	1.00	10.00	0	106	60	140			
Chlorobenzene	10.9	1.00	10.00	0	109	60	140			
1,1-Dichloroethene	11.9	1.00	10.00	0	119	60	140			
Trichloroethene (TCE)	11.1	1.00	10.00	0	111	60	140			
Surr: 1,2-Dichloroethane-d4	51.8		50.00		104	70	130			
Surr: 4-Bromofluorobenzene	47.6		50.00		95.1	70	130			
Surr: Dibromofluoromethane	47.2		50.00		94.3	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**lcs-2930**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**2930**	RunNo:	**4215**
Prep Date:	**7/20/2012**	Analysis Date:	**7/20/2012**	SeqNo:	**120456** Units: **µg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	49.8		50.00		99.7	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4233**	RunNo: **4233**			
Prep Date:	Analysis Date: **7/20/2012**	SeqNo: **120975**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120975** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120980** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.6	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120980** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **1207711-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120981** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	66.8	128			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **1207711-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120982** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	66.8	128	0.0297	16.7	
Toluene	22	1.0	20.00	0	110	70	130	4.99	18.7	
Chlorobenzene	21	1.0	20.00	0	104	70	130	0.103	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	7.04	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.3	70	130	2.25	17.5	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		119	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4379**	RunNo: **4379**			
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **122005**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122008** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	95.5	80	120			
Chlorobenzene	20	1.0	20.00	0	97.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.5	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4402**	RunNo: **4402**			
Prep Date:	Analysis Date: **7/24/2012**	SeqNo: **122636**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122636** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122639** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.2	84.1	126			
Toluene	20	1.0	20.00	0	102	80	120			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.6	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	84.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122639** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **1207922-010a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EB071812** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **122640** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	66.8	128			
Toluene	21	1.0	20.00	0.7840	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	95.6	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **1207922-010a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EB071812** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **122641** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	66.8	128	0.357	16.7	
Toluene	20	1.0	20.00	0.7840	97.4	70	130	4.94	18.7	
Chlorobenzene	19	1.0	20.00	0	96.4	70	130	5.90	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	90.7	70	130	5.30	16.7	
Trichloroethene (TCE)	17	1.0	20.00	0	86.6	70	130	0.772	17.5	
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		103	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125370** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.5	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125371** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125372** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **1207949-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125377** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **1207a22-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125378** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	460		500.0		92.4	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.8	70	130			
Surr: Dibromofluoromethane	510		500.0		102	70	130			
Surr: Toluene-d8	500		500.0		101	70	130			

Sample ID **1207a22-002amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125380** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	470		500.0		93.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	480		500.0		96.2	70	130	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207a22-002amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125380** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	520		500.0		104	70	130	0	0	
Surr: Toluene-d8	520		500.0		105	70	130	0	0	

Sample ID **1207949-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125381** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		107	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID **b15** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125426** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126086** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.8	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **100ng lcsb** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126090** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207a57-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126091** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	470		500.0		93.5	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.0	70	130			
Surr: Dibromofluoromethane	530		500.0		106	70	130			
Surr: Toluene-d8	520		500.0		104	70	130			

Sample ID **1207a57-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126092** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	460		500.0		91.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	500		500.0		99.5	70	130	0	0	
Surr: Dibromofluoromethane	530		500.0		106	70	130	0	0	
Surr: Toluene-d8	520		500.0		104	70	130	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2996**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **2996**	RunNo: **4454**			
Prep Date: **7/24/2012**	Analysis Date: **7/26/2012**	SeqNo: **124345**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2996** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124345** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		79.2	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.3	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		87.9	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.2	20.8	123			
Surr: Phenol-d5	2.7		3.330		82.4	19.8	115			

Sample ID **lcs-2996** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124346** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-2996** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124346** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	69.0	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	67.9	41.1	96.9			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	61.9	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	80.8	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.1	39.1	86.9			
4-Nitrophenol	2.8	0.25	3.330	0	82.9	44.2	107			
Pentachlorophenol	2.3	0.40	3.330	0	68.1	36.2	80			
Phenol	2.5	0.20	3.330	0	73.9	42.7	92.7			
Pyrene	1.0	0.20	1.670	0	62.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.4	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.8		3.330		82.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		75.6	19	133			
Surr: 2-Fluorophenol	2.2		3.330		66.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.8	20.8	123			
Surr: Phenol-d5	2.5		3.330		74.7	19.8	115			

Sample ID **1207666-001Ams** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124359** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.3	1.0	8.322	0	75.9	38.6	100			
4-Chloro-3-methylphenol	14	2.5	16.59	0	86.5	35.8	108			
2-Chlorophenol	13	1.0	16.59	0	79.4	48.2	96.1			
1,4-Dichlorobenzene	6.0	1.0	8.322	0	72.5	42.5	97.6			
2,4-Dinitrotoluene	7.0	2.5	8.322	0	84.0	51.2	108			
N-Nitrosodi-n-propylamine	7.0	1.0	8.322	0	84.7	31.6	114			
4-Nitrophenol	16	1.2	16.59	0.3837	94.3	22.7	144			
Pentachlorophenol	9.8	2.0	16.59	0	59.3	24	109			
Phenol	17	1.0	16.59	6.194	66.9	33.1	108			
Pyrene	5.2	1.0	8.322	0	62.5	42.7	98.9			
1,2,4-Trichlorobenzene	6.1	1.0	8.322	0	73.0	27.1	118			
Surr: 2,4,6-Tribromophenol	15		16.59		92.7	20.1	121			
Surr: 2-Fluorobiphenyl	6.6		8.322		79.8	19	133			
Surr: 2-Fluorophenol	13		16.59		75.7	20.2	108			
Surr: 4-Terphenyl-d14	6.3		8.322		75.6	18.9	115			
Surr: Nitrobenzene-d5	6.7		8.322		80.5	20.8	123			
Surr: Phenol-d5	15		16.59		88.8	19.8	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207666-001Amsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **2996** RunNo: **4454**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.2	1.0	8.406	0	73.4	38.6	100	2.26	20	
4-Chloro-3-methylphenol	14	2.5	16.76	0	81.8	35.8	108	4.66	20	
2-Chlorophenol	13	1.0	16.76	0	79.6	48.2	96.1	1.28	20	
1,4-Dichlorobenzene	6.2	1.0	8.406	0	73.6	42.5	97.6	2.48	20	
2,4-Dinitrotoluene	6.8	2.5	8.406	0	81.0	51.2	108	2.63	20	
N-Nitrosodi-n-propylamine	7.4	1.0	8.406	0	88.4	31.6	114	5.25	20	
4-Nitrophenol	15	1.3	16.76	0.3837	86.4	22.7	144	7.52	20	
Pentachlorophenol	10	2.0	16.76	0	61.0	24	109	3.78	20	
Phenol	20	1.0	16.76	6.194	81.0	33.1	108	13.4	20	
Pyrene	4.8	1.0	8.406	0	57.5	42.7	98.9	7.41	20	
1,2,4-Trichlorobenzene	6.3	1.0	8.406	0	74.7	27.1	118	3.30	20	
Surr: 2,4,6-Tribromophenol	15		16.76		88.4	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	6.3		8.406		75.1	19	133	0	0	
Surr: 2-Fluorophenol	14		16.76		81.8	20.2	108	0	0	
Surr: 4-Terphenyl-d14	6.1		8.406		72.3	18.9	115	0	0	
Surr: Nitrobenzene-d5	6.7		8.406		79.6	20.8	123	0	0	
Surr: Phenol-d5	15		16.76		88.2	19.8	115	0	0	

Sample ID **mb-3024** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125905** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-3024**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **3024**	RunNo: **4492**			
Prep Date: **7/25/2012**	Analysis Date: **7/27/2012**	SeqNo: **125905**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-3024** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125905** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		77.6	19	133			
Surr: 2-Fluorophenol	2.0		3.330		60.2	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.0	18.9	115			
Surr: Nitrobenzene-d5	1.1		1.670		67.4	20.8	123			
Surr: Phenol-d5	2.4		3.330		70.9	19.8	115			

Sample ID **lcs-3024** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125907** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	70.7	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	61.7	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	63.5	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	78.9	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.4	39.1	86.9			
4-Nitrophenol	2.9	0.25	3.330	0	85.9	44.2	107			
Pentachlorophenol	2.5	0.40	3.330	0	74.5	36.2	80			
Phenol	2.4	0.20	3.330	0	71.3	42.7	92.7			
Pyrene	1.1	0.20	1.670	0	67.5	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		98.0	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		74.2	19	133			
Surr: 2-Fluorophenol	1.9		3.330		57.9	20.2	108			
Surr: 4-Terphenyl-d14	1.4		1.670		84.5	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		70.6	20.8	123			
Surr: Phenol-d5	2.3		3.330		68.9	19.8	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207922-008Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SMWU 14-7 (6-8')** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125927** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.40	1.674	0	101	38.6	100			S
4-Chloro-3-methylphenol	2.8	1.0	3.339	0	84.9	35.8	108			
2-Chlorophenol	2.7	0.40	3.339	0	81.4	48.2	96.1			
1,4-Dichlorobenzene	1.2	0.40	1.674	0	73.3	42.5	97.6			
2,4-Dinitrotoluene	1.2	1.0	1.674	0	68.9	51.2	108			
N-Nitrosodi-n-propylamine	ND	0.40	1.674	0	0	31.6	114			S
4-Nitrophenol	2.1	0.50	3.339	0	63.0	22.7	144			
Pentachlorophenol	2.2	0.80	3.339	0	64.8	24	109			
Phenol	3.0	0.40	3.339	0	88.9	33.1	108			
Pyrene	1.6	0.40	1.674	0.2483	83.5	42.7	98.9			
1,2,4-Trichlorobenzene	1.2	0.40	1.674	0	69.7	27.1	118			
Surr: 2,4,6-Tribromophenol	2.2		3.339		67.3	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.674		76.2	19	133			
Surr: 2-Fluorophenol	2.4		3.339		71.5	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.674		90.0	18.9	115			
Surr: Nitrobenzene-d5	0		1.674		0	20.8	123			S
Surr: Phenol-d5	2.8		3.339		83.5	19.8	115			

Sample ID **1207922-008Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SMWU 14-7 (6-8')** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125928** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.40	1.671	0	86.7	38.6	100	15.9	20	
4-Chloro-3-methylphenol	2.8	1.0	3.332	0	84.1	35.8	108	1.20	20	
2-Chlorophenol	2.6	0.40	3.332	0	76.5	48.2	96.1	6.31	20	
1,4-Dichlorobenzene	1.2	0.40	1.671	0	70.6	42.5	97.6	3.92	20	
2,4-Dinitrotoluene	1.3	1.0	1.671	0	75.0	51.2	108	8.24	20	
N-Nitrosodi-n-propylamine	ND	0.40	1.671	0	0	31.6	114	0	20	S
4-Nitrophenol	2.0	0.50	3.332	0	61.2	22.7	144	3.20	20	
Pentachlorophenol	2.4	0.80	3.332	0	72.1	24	109	10.3	20	
Phenol	2.7	0.40	3.332	0	80.9	33.1	108	9.61	20	
Pyrene	1.5	0.40	1.671	0.2483	75.5	42.7	98.9	8.58	20	
1,2,4-Trichlorobenzene	1.2	0.40	1.671	0	74.3	27.1	118	6.12	20	
Surr: 2,4,6-Tribromophenol	2.3		3.332		69.8	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	1.2		1.671		70.5	19	133	0	0	
Surr: 2-Fluorophenol	2.4		3.332		71.0	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.4		1.671		84.2	18.9	115	0	0	
Surr: Nitrobenzene-d5	1.2		1.671		74.7	20.8	123	0	0	
Surr: Phenol-d5	2.7		3.332		80.4	19.8	115	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-3046** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127860** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	1.6		3.330		49.3	20.1	121			
Surr: 2-Fluorobiphenyl	0.71		1.670		42.7	19	133			
Surr: 2-Fluorophenol	1.2		3.330		34.6	20.2	108			
Surr: 4-Terphenyl-d14	0.73		1.670		43.6	18.9	115			
Surr: Nitrobenzene-d5	0.67		1.670		39.9	20.8	123			
Surr: Phenol-d5	1.3		3.330		38.0	19.8	115			

Sample ID **lcs-3046** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127861** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.0		3.330		91.5	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		71.4	19	133			
Surr: 2-Fluorophenol	1.9		3.330		56.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		76.8	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		69.2	20.8	123			
Surr: Phenol-d5	2.4		3.330		71.7	19.8	115			

Sample ID **1207940-019Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127874** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.2		3.310		95.8	20.1	121			
Surr: 2-Fluorobiphenyl	1.5		1.660		92.9	19	133			
Surr: 2-Fluorophenol	2.5		3.310		76.5	20.2	108			
Surr: 4-Terphenyl-d14	1.7		1.660		102	18.9	115			
Surr: Nitrobenzene-d5	1.5		1.660		91.6	20.8	123			
Surr: Phenol-d5	2.9		3.310		87.9	19.8	115			

Sample ID **1207940-019Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127875** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.5		3.323		106	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	1.6		1.667		96.8	19	133	0	0	
Surr: 2-Fluorophenol	2.5		3.323		75.0	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.8		1.667		108	18.9	115	0	0	
Surr: Nitrobenzene-d5	1.5		1.667		90.8	20.8	123	0	0	
Surr: Phenol-d5	3.1		3.323		91.9	19.8	115	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2989**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **2989**	RunNo: **4400**			
Prep Date: **7/24/2012**	Analysis Date: **7/24/2012**	SeqNo: **122513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2989**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **2989**	RunNo: **4400**			
Prep Date: **7/24/2012**	Analysis Date: **7/24/2012**	SeqNo: **122513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	170		200.0		85.4	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		85.5	37	114			
Surr: 2-Fluorophenol	120		200.0		61.4	23.4	98			
Surr: 4-Terphenyl-d14	79		100.0		79.3	41.3	116			
Surr: Nitrobenzene-d5	84		100.0		84.2	39.5	118			
Surr: Phenol-d5	110		200.0		53.2	20.9	95.9			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-2989** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **2989** RunNo: **4400**
Prep Date: **7/24/2012** Analysis Date: **7/24/2012** SeqNo: **122514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.1	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	35.5	108			
2-Chlorophenol	130	10	200.0	0	62.6	29.8	106			
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5			
2,4-Dinitrotoluene	83	10	100.0	0	82.7	44.7	112			
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.3	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	61.2	20.2	93			
Phenol	84	10	200.0	0	42.0	23	66.1			
Pyrene	71	10	100.0	0	71.2	40.1	101			
1,2,4-Trichlorobenzene	54	10	100.0	0	53.7	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		81.9	44.2	126			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	37	114			
Surr: 2-Fluorophenol	98		200.0		49.2	23.4	98			
Surr: 4-Terphenyl-d14	71		100.0		70.6	41.3	116			
Surr: Nitrobenzene-d5	65		100.0		65.1	39.5	118			
Surr: Phenol-d5	91		200.0		45.5	20.9	95.9			

Sample ID **lcsd-2989** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **2989** RunNo: **4400**
Prep Date: **7/24/2012** Analysis Date: **7/24/2012** SeqNo: **122515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	69.9	38.2	99.4	2.61	20	
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	35.5	108	13.1	20	
2-Chlorophenol	110	10	200.0	0	55.6	29.8	106	11.9	20	
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5	0.0854	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.2	44.7	112	9.75	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.6	38.5	105	5.82	20	
4-Nitrophenol	92	10	200.0	0	46.1	11.6	73.1	2.55	20	
Pentachlorophenol	110	20	200.0	0	57.5	20.2	93	6.30	20	
Phenol	83	10	200.0	0	41.5	23	66.1	1.15	20	
Pyrene	71	10	100.0	0	71.2	40.1	101	0	20	
1,2,4-Trichlorobenzene	56	10	100.0	0	55.5	37.7	99.1	3.33	20	
Surr: 2,4,6-Tribromophenol	150		200.0		75.1	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	73		100.0		73.1	37	114	0	0	
Surr: 2-Fluorophenol	81		200.0		40.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	80		100.0		79.8	41.3	116	0	0	
Surr: Nitrobenzene-d5	70		100.0		70.1	39.5	118	0	0	
Surr: Phenol-d5	88		200.0		44.2	20.9	95.9	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3180** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **3180** RunNo: **4662**
Prep Date: **8/3/2012** Analysis Date: **8/3/2012** SeqNo: **131070** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-3180** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **3180** RunNo: **4662**
Prep Date: **8/3/2012** Analysis Date: **8/3/2012** SeqNo: **131071** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Sample ID **1207917-009CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **3180** RunNo: **4662**
Prep Date: **8/3/2012** Analysis Date: **8/3/2012** SeqNo: **131078** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1658	0	98.9	75	125			

Sample ID **1207917-009CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **3180** RunNo: **4662**
Prep Date: **8/3/2012** Analysis Date: **8/3/2012** SeqNo: **131081** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1651	0	115	75	125	14.8	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3107** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3107** RunNo: **4677**
Prep Date: **7/31/2012** Analysis Date: **8/6/2012** SeqNo: **131415** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-3107** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3107** RunNo: **4677**
Prep Date: **7/31/2012** Analysis Date: **8/6/2012** SeqNo: **131416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	96.5	80	120			
Barium	23	0.10	25.00	0	91.0	80	120			
Beryllium	25	0.15	25.00	0	98.2	80	120			
Cadmium	23	0.10	25.00	0	91.9	80	120			
Chromium	23	0.30	25.00	0	90.5	80	120			
Lead	23	0.25	25.00	0	91.2	80	120			
Manganese	22	0.10	25.00	0	89.5	80	120			
Nickel	22	0.50	25.00	0	88.1	80	120			
Selenium	23	2.5	25.00	0	93.1	80	120			
Silver	4.6	0.25	5.000	0	92.6	80	120			
Vanadium	24	2.5	25.00	0	94.5	80	120			
Zinc	23	2.5	25.00	0	93.0	80	120			

Sample ID **MB-3107** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3107** RunNo: **4698**
Prep Date: **7/31/2012** Analysis Date: **8/6/2012** SeqNo: **132142** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS-3107** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3107** RunNo: **4698**
Prep Date: **7/31/2012** Analysis Date: **8/6/2012** SeqNo: **132143** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.7880	103	80	120			

Sample ID **MB-3107** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3107** RunNo: **4734**
Prep Date: **7/31/2012** Analysis Date: **8/8/2012** SeqNo: **133431** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Cobalt	ND	0.30								

Sample ID **LCS-3107** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3107** RunNo: **4734**
Prep Date: **7/31/2012** Analysis Date: **8/8/2012** SeqNo: **133432** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	26	2.5	25.00	0	103	80	120			
Cobalt	24	0.30	25.00	0	94.8	80	120			

Sample ID **1207917-006CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3107** RunNo: **4816**
Prep Date: **7/31/2012** Analysis Date: **8/10/2012** SeqNo: **135937** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	13	12	24.90	3.628	37.5	75	125			S
Arsenic	24	12	24.90	0	95.2	75	125			
Beryllium	25	0.75	24.90	0.7577	99.3	75	125			
Cadmium	24	0.50	24.90	0	94.7	75	125			
Chromium	37	1.5	24.90	12.12	99.0	75	125			
Cobalt	27	1.5	24.90	3.833	91.0	75	125			
Lead	23	1.2	24.90	4.390	76.5	75	125			
Nickel	30	2.5	24.90	7.255	90.8	75	125			
Selenium	19	12	24.90	0	77.0	75	125			
Silver	4.5	1.2	4.981	0	89.7	75	125			
Vanadium	50	12	24.90	20.97	117	75	125			
Zinc	49	12	24.90	35.46	52.9	75	125			S

Sample ID **1207917-006CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3107** RunNo: **4816**
Prep Date: **7/31/2012** Analysis Date: **8/10/2012** SeqNo: **135940** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.81	3.628	35.3	75	125	200	20	S

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207922**
22-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207917-006CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3107** RunNo: **4816**
Prep Date: **7/31/2012** Analysis Date: **8/10/2012** SeqNo: **135940** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	22	12	24.81	0	88.4	75	125	7.79	20	
Beryllium	25	0.75	24.81	0.7577	96.5	75	125	3.15	20	
Cadmium	23	0.50	24.81	0	92.9	75	125	2.30	20	
Chromium	33	1.5	24.81	12.12	84.2	75	125	10.8	20	
Cobalt	26	1.5	24.81	3.833	89.7	75	125	1.59	20	
Lead	23	1.2	24.81	4.390	76.6	75	125	0.134	20	
Nickel	28	2.5	24.81	7.255	82.8	75	125	7.18	20	
Selenium	18	12	24.81	0	70.7	75	125	8.91	20	S
Silver	4.3	1.2	4.962	0	86.6	75	125	3.84	20	
Vanadium	46	12	24.81	20.97	98.9	75	125	9.82	20	
Zinc	51	12	24.81	35.46	63.8	75	125	5.31	20	S

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1207922**

Received by/date: 07/20/12

Logged By: **Ashley Gallegos** **7/20/2012 7:55:00 AM**

Completed By: **Ashley Gallegos** **7/20/2012 12:08:43 PM**

Reviewed By: 07/20/12

Chain of Custody

1. Were seals intact? Yes No Not Present ✔
2. Is Chain of Custody complete? Yes ✔ No Not Present
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ✔ No NA
5. Was an attempt made to cool the samples? Yes ✔ No NA
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ✔ No NA
7. Sample(s) in proper container(s)? Yes ✔ No
8. Sufficient sample volume for indicated test(s)? Yes ✔ No
9. Are samples (except VOA and ONG) properly preserved? Yes ✔ No
10. Was preservative added to bottles? Yes No ✔ NA
11. VOA vials have zero headspace? Yes No No VOA Vials ✔
12. Were any sample containers received broken? Yes No ✔
13. Does paperwork match bottle labels? Yes ✔ No
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ✔ No
15. Is it clear what analyses were requested? Yes ✔ No
16. Were all holding times able to be met? Yes ✔ No
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 1 2 (<2 or >12 unless noted)

Adjusted? —

Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush ____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207922	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/18/12	1620	SOIL	SWMU 14-9 (0-0.5')	2 ENCORES	—	-001										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1620		SWMU 14-9 (0-0.5') DUP	2 ENCORES	—	-002										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1630		SWMU 14-9 (1.5-2)	2 ENCORES	—	-003										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1640		SWMU 14-9 (4-6')	2 ENCORES	—	-004										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
7/19/12	0830	[signature]	[signature]	07/20/12	0755	
Date:	Time:	Relinquished by:	Received by:	Date	Time	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207922	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO + DRO	METALS			Air Bubbles (Y or N)
7/18/12	1700	SOIL	SWMU 14-9 (13-14')	2 ENCORES	—	-005										X						
	↓		↓	2 VIALS	MeOH											X						
	↓		↓	2 JARS	—											X	X	X	X			
	1830		SWMU 14-7 (0-0.5')	2 ENCORES	—	-006										X						
	↓		↓	2 VIALS	MeOH											X						
	↓		↓	2 JARS	—											X	X	X	X			
	1850		SWMU 14-7 (1.5-2)	2 ENCORES	—	-007										X						
	↓		↓	2 JARS	—											X	X	X	X			
	↓		↓	2 VIALS	MeOH											X						
	1910		SWMU 14-7 (6-8)	2 ENCORES	—	-008										X						
	↓		↓	2 VIALS	MeOH											X						
↓	↓	↓	↓	2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/19/12	0830	[signature]	[signature]	07/20/12	0755
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU NO.14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS	TPH		Air Bubbles (Y or N)
7.18.12	1920	SOIL	SWMU 14-7	2 ENCORES	—	-009										X						
↓	↓	↓	(23.5-24) ↓	2 VIALS	MeOH											X						
↓	↓	↓	↓	2 JARS	—											X	X	X	X			
7.18.12	1945	WATER	EB071812	6 VOA	HCL & NEAT	-010										X				X		
↓	↓	↓	↓	1 L AMBER	—												X					
↓	↓	↓	↓	1 PLASTIC	HNO_3														X			
↓	↓	↓	↓	1 PLASTIC	NaOH														X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/19/12	0830	[signature]	[signature]	07/20/12	0755
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Metals List for SWMU No. 14 Old API Separator
Gallup Refinery
Western Refining Southwest, Inc.

Analyte	Analytical Method
Antimony	SW-846 method 6010/6020
Arsenic	SW-846 method 6010/6020
Barium	SW-846 method 6010/6020
Beryllium	SW-846 method 6010/6020
Cadmium	SW-846 method 6010/6020
Chromium	SW-846 method 6010/6020
Cobalt	SW-846 method 6010/6020
Cyanide	SW-846 method 335.4/335.2 mod
Lead	SW-846 method 6010/6020
Mercury	SW-846 method 7470/7471
Nickel	SW-846 method 6010/6020
Selenium	SW-846 method 6010/6020
Silver	SW-846 method 6010/6020
Vanadium	SW-846 method 6010/6020
Zinc	SW-846 method 6010/6020
Iron	SW-846 method 6010/6020
Manganese	SW-846 method 6010/6020

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 21, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.14 OrderNo.: 1207940

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 34 sample(s) on 7/20/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1207940**
Date Reported: **8/21/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:00:00 AM
Lab ID: 1207940-001
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	350	10		mg/Kg	1	7/23/2012 10:46:54 AM
Motor Oil Range Organics (MRO)	190	50		mg/Kg	1	7/23/2012 10:46:54 AM
Surr: DNOP	111	77.6-140		%REC	1	7/23/2012 10:46:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/27/2012 2:33:57 AM
Surr: BFB	103	84-116		%REC	2	7/27/2012 2:33:57 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.32	0.033		mg/Kg	1	8/2/2012 9:11:33 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 2:33:40 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:32:50 PM
Barium	430	5.0		mg/Kg	50	8/5/2012 12:52:36 PM
Beryllium	0.89	0.75		mg/Kg	5	8/4/2012 3:32:50 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:33:40 PM
Chromium	23	1.5		mg/Kg	5	8/1/2012 2:33:40 PM
Cobalt	5.4	1.5		mg/Kg	5	8/4/2012 3:32:50 PM
Iron	15000	500		mg/Kg	500	8/5/2012 12:54:47 PM
Lead	7.7	1.2		mg/Kg	5	8/4/2012 3:32:50 PM
Manganese	510	5.0		mg/Kg	50	8/5/2012 12:52:36 PM
Nickel	9.3	2.5		mg/Kg	5	8/4/2012 3:32:50 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:32:50 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:33:40 PM
Vanadium	25	12		mg/Kg	5	8/1/2012 2:33:40 PM
Zinc	49	12		mg/Kg	5	8/4/2012 3:32:50 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:00:00 AM
Lab ID: 1207940-001
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/27/2012 4:18:42 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/27/2012 4:18:42 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/27/2012 4:18:42 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 4:18:42 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:00:00 AM
Lab ID: 1207940-001
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 4:18:42 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/27/2012 4:18:42 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 4:18:42 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Surr: 2,4,6-Tribromophenol	104	20.1-121		%REC	1	7/27/2012 4:18:42 PM
Surr: 2-Fluorobiphenyl	93.2	19-133		%REC	1	7/27/2012 4:18:42 PM
Surr: 2-Fluorophenol	92.3	20.2-108		%REC	1	7/27/2012 4:18:42 PM
Surr: 4-Terphenyl-d14	97.6	18.9-115		%REC	1	7/27/2012 4:18:42 PM
Surr: Nitrobenzene-d5	91.6	20.8-123		%REC	1	7/27/2012 4:18:42 PM
Surr: Phenol-d5	83.0	19.8-115		%REC	1	7/27/2012 4:18:42 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Toluene	2.92	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Ethylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Xylenes, Total	ND	2.94		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Methyl tert-butyl ether (MTBE)	ND	1.96		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2,4-Trimethylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,3,5-Trimethylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dichloroethane (EDC)	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dibromoethane (EDB)	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Naphthalene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1-Methylnaphthalene	ND	3.93		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2-Methylnaphthalene	ND	3.93		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Acetone	ND	29.4		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Bromobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Bromodichloromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Bromoform	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2-Butanone	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Carbon tetrachloride	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Chlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Chloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Chloroform	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:00:00 AM
Lab ID: 1207940-001
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2-Chlorotoluene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Carbon disulfide	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
4-Chlorotoluene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
cis-1,2-DCE	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
cis-1,3-Dichloropropene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dibromo-3-chloropropane	ND	1.96		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Dibromochloromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Dibromomethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,3-Dichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,4-Dichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Dichlorodifluoromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1-Dichloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1-Dichloroethene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dichloropropane	ND	1.96		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,3-Dichloropropane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2,2-Dichloropropane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1-Dichloropropene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Hexachlorobutadiene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Isopropylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
4-Isopropyltoluene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Methylene chloride	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
n-Butylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2-Hexanone	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
n-Propylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
sec-Butylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Styrene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
4-Methyl-2-pentanone	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
tert-Butylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1,1,2-Tetrachloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1,2,2-Tetrachloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Tetrachloroethene (PCE)	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
trans-1,2-DCE	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
trans-1,3-Dichloropropene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2,3-Trichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2,4-Trichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1,1-Trichloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1,2-Trichloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Trichloroethene (TCE)	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Trichlorofluoromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2,3-Trichloropropane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:00:00 AM
Lab ID: 1207940-001
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	7/26/2012 7:57:54 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	1	7/26/2012 7:57:54 PM
Surr: Dibromofluoromethane	88.0	70-130		%REC	1	7/26/2012 7:57:54 PM
Surr: Toluene-d8	97.9	70-130		%REC	1	7/26/2012 7:57:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207940-002 **Matrix:** SOIL

Client Sample ID: SWMU 14-10 (1.5-2.0')
Collection Date: 7/19/2012 11:05:00 AM
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	240	10		mg/Kg	1	7/23/2012 11:12:14 AM
Motor Oil Range Organics (MRO)	150	51		mg/Kg	1	7/23/2012 11:12:14 AM
Surr: DNOP	111	77.6-140		%REC	1	7/23/2012 11:12:14 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/27/2012 3:02:41 AM
Surr: BFB	101	84-116		%REC	2	7/27/2012 3:02:41 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.21	0.16		mg/Kg	5	8/2/2012 9:29:23 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 2:38:44 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:35:11 PM
Barium	430	5.0		mg/Kg	50	8/5/2012 12:57:26 PM
Beryllium	0.83	0.75		mg/Kg	5	8/4/2012 3:35:11 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:38:44 PM
Chromium	23	1.5		mg/Kg	5	8/1/2012 2:38:44 PM
Cobalt	5.1	1.5		mg/Kg	5	8/4/2012 3:35:11 PM
Iron	14000	500		mg/Kg	500	8/5/2012 12:59:38 PM
Lead	6.8	1.2		mg/Kg	5	8/4/2012 3:35:11 PM
Manganese	530	5.0		mg/Kg	50	8/5/2012 12:57:26 PM
Nickel	8.8	2.5		mg/Kg	5	8/4/2012 3:35:11 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:35:11 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:38:44 PM
Vanadium	23	12		mg/Kg	5	8/1/2012 2:38:44 PM
Zinc	43	12		mg/Kg	5	8/4/2012 3:35:11 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Acenaphthylene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Aniline	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Anthracene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Azobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:05:00 AM
Lab ID: 1207940-002
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Carbazole	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 4:48:12 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Chrysene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 4:48:12 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Dibenzofuran	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 4:48:12 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 4:48:12 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 4:48:12 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 4:48:12 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
Fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Fluorene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Hexachloroethane	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Naphthalene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:05:00 AM
Lab ID: 1207940-002 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 4:48:12 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 4:48:12 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 4:48:12 PM
Phenanthrene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Phenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Pyrene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Surr: 2,4,6-Tribromophenol	105	20.1-121		%REC	1	7/27/2012 4:48:12 PM
Surr: 2-Fluorobiphenyl	96.1	19-133		%REC	1	7/27/2012 4:48:12 PM
Surr: 2-Fluorophenol	89.6	20.2-108		%REC	1	7/27/2012 4:48:12 PM
Surr: 4-Terphenyl-d14	100	18.9-115		%REC	1	7/27/2012 4:48:12 PM
Surr: Nitrobenzene-d5	93.1	20.8-123		%REC	1	7/27/2012 4:48:12 PM
Surr: Phenol-d5	85.9	19.8-115		%REC	1	7/27/2012 4:48:12 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Toluene	0.892	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Ethylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Xylenes, Total	ND	2.64		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Methyl tert-butyl ether (MTBE)	ND	1.76		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2,4-Trimethylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,3,5-Trimethylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dichloroethane (EDC)	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dibromoethane (EDB)	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Naphthalene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1-Methylnaphthalene	ND	3.52		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2-Methylnaphthalene	ND	3.52		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Acetone	ND	26.4		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Bromobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Bromodichloromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Bromoform	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2-Butanone	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Carbon tetrachloride	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Chlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Chloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Chloroform	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:05:00 AM
Lab ID: 1207940-002
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2-Chlorotoluene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Carbon disulfide	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
4-Chlorotoluene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
cis-1,2-DCE	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
cis-1,3-Dichloropropene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dibromo-3-chloropropane	ND	1.76		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Dibromochloromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Dibromomethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,3-Dichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,4-Dichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Dichlorodifluoromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1-Dichloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1-Dichloroethene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dichloropropane	ND	1.76		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,3-Dichloropropane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2,2-Dichloropropane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1-Dichloropropene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Hexachlorobutadiene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Isopropylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
4-Isopropyltoluene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Methylene chloride	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
n-Butylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2-Hexanone	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
n-Propylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
sec-Butylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Styrene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
4-Methyl-2-pentanone	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
tert-Butylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1,1,2-Tetrachloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1,2,2-Tetrachloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Tetrachloroethene (PCE)	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
trans-1,2-DCE	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
trans-1,3-Dichloropropene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2,3-Trichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2,4-Trichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1,1-Trichloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1,2-Trichloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Trichloroethene (TCE)	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Trichlorofluoromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2,3-Trichloropropane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-10 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:05:00 AM
Lab ID: 1207940-002
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Surr: 1,2-Dichloroethane-d4	188	70-130	S	%REC	1	7/26/2012 8:25:36 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	7/26/2012 8:25:36 PM
Surr: Dibromofluoromethane	92.1	70-130		%REC	1	7/26/2012 8:25:36 PM
Surr: Toluene-d8	94.8	70-130		%REC	1	7/26/2012 8:25:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:27:00 AM
Lab ID: 1207940-003
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	550	200		mg/Kg	20	7/23/2012 9:29:46 AM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	7/23/2012 9:29:46 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 9:29:46 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/27/2012 3:31:25 AM
Surr: BFB	99.9	84-116		%REC	5	7/27/2012 3:31:25 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.041	0.033		mg/Kg	1	8/2/2012 9:20:31 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 2:43:53 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:37:35 PM
Barium	610	5.0		mg/Kg	50	8/5/2012 1:02:12 PM
Beryllium	0.77	0.75		mg/Kg	5	8/4/2012 3:37:35 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:43:53 PM
Chromium	16	1.5		mg/Kg	5	8/1/2012 2:43:53 PM
Cobalt	5.0	1.5		mg/Kg	5	8/4/2012 3:37:35 PM
Iron	15000	500		mg/Kg	500	8/5/2012 1:14:21 PM
Lead	6.2	1.2		mg/Kg	5	8/4/2012 3:37:35 PM
Manganese	470	5.0		mg/Kg	50	8/5/2012 1:02:12 PM
Nickel	7.4	2.5		mg/Kg	5	8/4/2012 3:37:35 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:37:35 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:43:53 PM
Vanadium	25	12		mg/Kg	5	8/1/2012 2:43:53 PM
Zinc	33	12		mg/Kg	5	8/4/2012 3:37:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:27:00 AM
Lab ID: 1207940-003
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/27/2012 5:17:55 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/27/2012 5:17:55 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/27/2012 5:17:55 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 5:17:55 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:27:00 AM
Lab ID: 1207940-003
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 5:17:55 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/27/2012 5:17:55 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 5:17:55 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Surr: 2,4,6-Tribromophenol	107	20.1-121		%REC	1	7/27/2012 5:17:55 PM
Surr: 2-Fluorobiphenyl	95.5	19-133		%REC	1	7/27/2012 5:17:55 PM
Surr: 2-Fluorophenol	92.9	20.2-108		%REC	1	7/27/2012 5:17:55 PM
Surr: 4-Terphenyl-d14	97.3	18.9-115		%REC	1	7/27/2012 5:17:55 PM
Surr: Nitrobenzene-d5	93.5	20.8-123		%REC	1	7/27/2012 5:17:55 PM
Surr: Phenol-d5	84.8	19.8-115		%REC	1	7/27/2012 5:17:55 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	12.2	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Toluene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Ethylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Xylenes, Total	ND	2.54		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Methyl tert-butyl ether (MTBE)	ND	1.69		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2,4-Trimethylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,3,5-Trimethylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dichloroethane (EDC)	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dibromoethane (EDB)	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Naphthalene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1-Methylnaphthalene	ND	3.39		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2-Methylnaphthalene	ND	3.39		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Acetone	ND	25.4		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Bromobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Bromodichloromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Bromoform	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2-Butanone	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Carbon tetrachloride	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Chlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Chloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Chloroform	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:27:00 AM
Lab ID: 1207940-003
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2-Chlorotoluene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Carbon disulfide	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
4-Chlorotoluene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
cis-1,2-DCE	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
cis-1,3-Dichloropropene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dibromo-3-chloropropane	ND	1.69		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Dibromochloromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Dibromomethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,3-Dichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,4-Dichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Dichlorodifluoromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1-Dichloroethane	0.918	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1-Dichloroethene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dichloropropane	ND	1.69		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,3-Dichloropropane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2,2-Dichloropropane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1-Dichloropropene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Hexachlorobutadiene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Isopropylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
4-Isopropyltoluene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Methylene chloride	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
n-Butylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2-Hexanone	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
n-Propylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
sec-Butylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Styrene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
4-Methyl-2-pentanone	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
tert-Butylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1,1,2-Tetrachloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1,2,2-Tetrachloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Tetrachloroethene (PCE)	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
trans-1,2-DCE	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
trans-1,3-Dichloropropene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2,3-Trichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2,4-Trichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1,1-Trichloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1,2-Trichloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Trichloroethene (TCE)	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Trichlorofluoromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2,3-Trichloropropane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:27:00 AM
Lab ID: 1207940-003
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Surr: 1,2-Dichloroethane-d4	168	70-130	S	%REC	1	7/26/2012 8:53:14 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	1	7/26/2012 8:53:14 PM
Surr: Dibromofluoromethane	87.2	70-130		%REC	1	7/26/2012 8:53:14 PM
Surr: Toluene-d8	96.6	70-130		%REC	1	7/26/2012 8:53:14 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:40:00 AM
Lab ID: 1207940-004
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	4300	200		mg/Kg	20	7/23/2012 9:51:40 AM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/23/2012 9:51:40 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 9:51:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/27/2012 4:00:09 AM
Surr: BFB	111	84-116		%REC	50	7/27/2012 4:00:09 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:22:17 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 2:48:46 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:39:56 PM
Barium	690	50		mg/Kg	500	8/5/2012 1:16:54 PM
Beryllium	0.88	0.75		mg/Kg	5	8/4/2012 3:39:56 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:48:46 PM
Chromium	10	1.5		mg/Kg	5	8/1/2012 2:48:46 PM
Cobalt	4.7	1.5		mg/Kg	5	8/4/2012 3:39:56 PM
Iron	13000	500		mg/Kg	500	8/5/2012 1:16:54 PM
Lead	5.0	1.2		mg/Kg	5	8/4/2012 3:39:56 PM
Manganese	190	0.50		mg/Kg	5	8/4/2012 3:39:56 PM
Nickel	7.9	2.5		mg/Kg	5	8/4/2012 3:39:56 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:39:56 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:48:46 PM
Vanadium	18	12		mg/Kg	5	8/1/2012 2:48:46 PM
Zinc	15	12		mg/Kg	5	8/4/2012 3:39:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:40:00 AM
Lab ID: 1207940-004
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 5:47:57 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 5:47:57 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 5:47:57 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 5:47:57 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
1-Methylnaphthalene	3.6	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2-Methylnaphthalene	4.2	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Naphthalene	1.5	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:40:00 AM
Lab ID: 1207940-004
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 5:47:57 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 5:47:57 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 5:47:57 PM
Phenanthrene	1.1	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Surr: 2,4,6-Tribromophenol	87.4	20.1-121		%REC	1	7/27/2012 5:47:57 PM
Surr: 2-Fluorobiphenyl	70.0	19-133		%REC	1	7/27/2012 5:47:57 PM
Surr: 2-Fluorophenol	72.2	20.2-108		%REC	1	7/27/2012 5:47:57 PM
Surr: 4-Terphenyl-d14	75.0	18.9-115		%REC	1	7/27/2012 5:47:57 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/27/2012 5:47:57 PM
Surr: Phenol-d5	86.8	19.8-115		%REC	1	7/27/2012 5:47:57 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Toluene	1.4	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Ethylbenzene	3.8	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2,4-Trimethylbenzene	6.7	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,3,5-Trimethylbenzene	2.2	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Naphthalene	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1-Methylnaphthalene	ND	4.0		mg/Kg	20	7/23/2012 11:36:10 PM
2-Methylnaphthalene	ND	4.0		mg/Kg	20	7/23/2012 11:36:10 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 11:36:10 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 11:36:10 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 11:36:10 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 11:36:10 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 11:40:00 AM
Lab ID: 1207940-004
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 11:36:10 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 11:36:10 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 11:36:10 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 11:36:10 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
n-Propylbenzene	1.4	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Xylenes, Total	9.3	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	20	7/23/2012 11:36:10 PM
Surr: 4-Bromofluorobenzene	86.6	70-130		%REC	20	7/23/2012 11:36:10 PM
Surr: Dibromofluoromethane	108	70-130		%REC	20	7/23/2012 11:36:10 PM
Surr: Toluene-d8	101	70-130		%REC	20	7/23/2012 11:36:10 PM

Qualifiers:

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	3600	200		mg/Kg	20	7/23/2012 10:13:29 AM
Motor Oil Range Organics (MRO)	ND	980		mg/Kg	20	7/23/2012 10:13:29 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 10:13:29 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/27/2012 4:28:51 AM
Surr: BFB	115	84-116		%REC	50	7/27/2012 4:28:51 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:24:04 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:02:41 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:42:19 PM
Barium	410	10		mg/Kg	100	8/5/2012 1:21:10 PM
Beryllium	0.93	0.75		mg/Kg	5	8/4/2012 3:42:19 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:02:41 PM
Chromium	11	1.5		mg/Kg	5	8/1/2012 3:02:41 PM
Cobalt	5.0	1.5		mg/Kg	5	8/4/2012 3:42:19 PM
Iron	14000	500		mg/Kg	500	8/5/2012 1:23:20 PM
Lead	3.7	1.2		mg/Kg	5	8/4/2012 3:42:19 PM
Manganese	210	0.50		mg/Kg	5	8/4/2012 3:42:19 PM
Nickel	8.5	2.5		mg/Kg	5	8/4/2012 3:42:19 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:42:19 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:02:41 PM
Vanadium	21	12		mg/Kg	5	8/1/2012 3:02:41 PM
Zinc	17	12		mg/Kg	5	8/4/2012 3:42:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 6:18:03 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 6:18:03 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 6:18:03 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 6:18:03 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
1-Methylnaphthalene	1.5	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2-Methylnaphthalene	1.6	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 6:18:03 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 6:18:03 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 6:18:03 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Surr: 2,4,6-Tribromophenol	111	20.1-121		%REC	1	7/27/2012 6:18:03 PM
Surr: 2-Fluorobiphenyl	92.7	19-133		%REC	1	7/27/2012 6:18:03 PM
Surr: 2-Fluorophenol	103	20.2-108		%REC	1	7/27/2012 6:18:03 PM
Surr: 4-Terphenyl-d14	110	18.9-115		%REC	1	7/27/2012 6:18:03 PM
Surr: Nitrobenzene-d5	114	20.8-123		%REC	1	7/27/2012 6:18:03 PM
Surr: Phenol-d5	106	19.8-115		%REC	1	7/27/2012 6:18:03 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Toluene	1.7	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Ethylbenzene	4.7	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2,4-Trimethylbenzene	8.4	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,3,5-Trimethylbenzene	2.7	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Naphthalene	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1-Methylnaphthalene	ND	4.0		mg/Kg	20	7/24/2012 12:32:38 AM
2-Methylnaphthalene	ND	4.0		mg/Kg	20	7/24/2012 12:32:38 AM
Acetone	ND	15		mg/Kg	20	7/24/2012 12:32:38 AM
Bromobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Bromoform	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Bromomethane	ND	3.0		mg/Kg	20	7/24/2012 12:32:38 AM
2-Butanone	ND	10		mg/Kg	20	7/24/2012 12:32:38 AM
Carbon disulfide	ND	10		mg/Kg	20	7/24/2012 12:32:38 AM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
Chlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Chloroethane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM

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Chloromethane	ND	3.0		mg/Kg	20	7/24/2012 12:32:38 AM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Dibromomethane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
2-Hexanone	ND	10		mg/Kg	20	7/24/2012 12:32:38 AM
Isopropylbenzene	1.2	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/24/2012 12:32:38 AM
Methylene chloride	ND	3.0		mg/Kg	20	7/24/2012 12:32:38 AM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
n-Propylbenzene	1.7	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Styrene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-8 (1.5-2.0') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 11:40:00 AM
Lab ID: 1207940-005
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Xylenes, Total	12	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	20	7/24/2012 12:32:38 AM
Surr: 4-Bromofluorobenzene	78.2	70-130		%REC	20	7/24/2012 12:32:38 AM
Surr: Dibromofluoromethane	104	70-130		%REC	20	7/24/2012 12:32:38 AM
Surr: Toluene-d8	104	70-130		%REC	20	7/24/2012 12:32:38 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:05:00 PM
Lab ID: 1207940-006
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	15000	190		mg/Kg	20	7/23/2012 10:57:23 AM
Motor Oil Range Organics (MRO)	ND	970		mg/Kg	20	7/23/2012 10:57:23 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 10:57:23 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	700	500		mg/Kg	100	7/27/2012 4:57:29 AM
Surr: BFB	111	84-116		%REC	100	7/27/2012 4:57:29 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.040	0.033		mg/Kg	1	8/2/2012 9:34:47 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:07:46 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:44:40 PM
Barium	150	0.50		mg/Kg	5	8/4/2012 3:44:40 PM
Beryllium	1.0	0.75		mg/Kg	5	8/4/2012 3:44:40 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:07:46 PM
Chromium	12	1.5		mg/Kg	5	8/1/2012 3:07:46 PM
Cobalt	5.9	1.5		mg/Kg	5	8/4/2012 3:44:40 PM
Iron	15000	500		mg/Kg	500	8/5/2012 1:25:53 PM
Lead	4.4	1.2		mg/Kg	5	8/4/2012 3:44:40 PM
Manganese	240	0.50		mg/Kg	5	8/4/2012 3:44:40 PM
Nickel	9.8	2.5		mg/Kg	5	8/4/2012 3:44:40 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:44:40 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:07:46 PM
Vanadium	23	12		mg/Kg	5	8/1/2012 3:07:46 PM
Zinc	18	12		mg/Kg	5	8/4/2012 3:44:40 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:05:00 PM
Lab ID: 1207940-006
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 6:48:08 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 6:48:08 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 6:48:08 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/27/2012 6:48:08 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 6:48:08 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/27/2012 6:48:08 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
1-Methylnaphthalene	21	4.0		mg/Kg	10	7/30/2012 5:05:23 PM
2-Methylnaphthalene	32	4.0		mg/Kg	10	7/30/2012 5:05:23 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
3+4-Methylphenol	1.1	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Naphthalene	6.6	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:05:00 PM
Lab ID: 1207940-006
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/27/2012 6:48:08 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 6:48:08 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/27/2012 6:48:08 PM
Phenanthrene	7.3	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Phenol	2.1	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Pyrene	1.1	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Surr: 2,4,6-Tribromophenol	0	20.1-121	S	%REC	1	7/27/2012 6:48:08 PM
Surr: 2-Fluorobiphenyl	46.3	19-133		%REC	1	7/27/2012 6:48:08 PM
Surr: 2-Fluorophenol	30.2	20.2-108		%REC	1	7/27/2012 6:48:08 PM
Surr: 4-Terphenyl-d14	62.5	18.9-115		%REC	1	7/27/2012 6:48:08 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/27/2012 6:48:08 PM
Surr: Phenol-d5	67.0	19.8-115		%REC	1	7/27/2012 6:48:08 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	5.9	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Toluene	45	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Ethylbenzene	17	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2,4-Trimethylbenzene	38	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,3,5-Trimethylbenzene	11	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Naphthalene	16	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1-Methylnaphthalene	29	10		mg/Kg	50	7/22/2012 12:37:39 AM
2-Methylnaphthalene	50	10		mg/Kg	50	7/22/2012 12:37:39 AM
Acetone	ND	38		mg/Kg	50	7/22/2012 12:37:39 AM
Bromobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Bromoform	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Bromomethane	ND	7.5		mg/Kg	50	7/22/2012 12:37:39 AM
2-Butanone	ND	25		mg/Kg	50	7/22/2012 12:37:39 AM
Carbon disulfide	ND	25		mg/Kg	50	7/22/2012 12:37:39 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
Chlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Chloroethane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:05:00 PM
Lab ID: 1207940-006
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Chloromethane	ND	7.5		mg/Kg	50	7/22/2012 12:37:39 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Dibromomethane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
2-Hexanone	ND	25		mg/Kg	50	7/22/2012 12:37:39 AM
Isopropylbenzene	3.0	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/22/2012 12:37:39 AM
Methylene chloride	ND	7.5		mg/Kg	50	7/22/2012 12:37:39 AM
n-Butylbenzene	4.0	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
n-Propylbenzene	6.2	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Styrene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:05:00 PM
Lab ID: 1207940-006
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Xylenes, Total	86	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	50	7/22/2012 12:37:39 AM
Surr: 4-Bromofluorobenzene	86.2	70-130		%REC	50	7/22/2012 12:37:39 AM
Surr: Dibromofluoromethane	93.3	70-130		%REC	50	7/22/2012 12:37:39 AM
Surr: Toluene-d8	97.4	70-130		%REC	50	7/22/2012 12:37:39 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:12:00 PM
Lab ID: 1207940-007 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1500	97		mg/Kg	10	7/23/2012 7:19:35 AM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/23/2012 7:19:35 AM
Surr: DNOP	0	77.6-140	S	%REC	10	7/23/2012 7:19:35 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	370	100		mg/Kg	20	7/30/2012 4:07:16 PM
Surr: BFB	115	84-116		%REC	20	7/30/2012 4:07:16 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.097	0.033		mg/Kg	1	8/2/2012 9:36:35 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:12:50 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:47:03 PM
Barium	120	0.50		mg/Kg	5	8/4/2012 3:47:03 PM
Beryllium	0.95	0.75		mg/Kg	5	8/4/2012 3:47:03 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:12:50 PM
Chromium	12	1.5		mg/Kg	5	8/1/2012 3:12:50 PM
Cobalt	5.3	1.5		mg/Kg	5	8/4/2012 3:47:03 PM
Iron	15000	500		mg/Kg	500	8/5/2012 1:38:51 PM
Lead	2.6	1.2		mg/Kg	5	8/4/2012 3:47:03 PM
Manganese	300	10		mg/Kg	100	8/5/2012 1:36:26 PM
Nickel	8.7	2.5		mg/Kg	5	8/4/2012 3:47:03 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:47:03 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:12:50 PM
Vanadium	22	12		mg/Kg	5	8/1/2012 3:12:50 PM
Zinc	18	12		mg/Kg	5	8/4/2012 3:47:03 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:12:00 PM
Lab ID: 1207940-007
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 7:18:12 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 7:18:12 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 7:18:12 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/27/2012 7:18:12 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 7:18:12 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/27/2012 7:18:12 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
1-Methylnaphthalene	5.2	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2-Methylnaphthalene	7.7	2.0		mg/Kg	5	7/30/2012 5:35:57 PM
2-Methylphenol	1.1	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
3+4-Methylphenol	2.2	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Naphthalene	1.6	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:12:00 PM
Lab ID: 1207940-007
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/27/2012 7:18:12 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 7:18:12 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/27/2012 7:18:12 PM
Phenanthrene	1.2	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Phenol	2.8	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Pyrene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Surr: 2,4,6-Tribromophenol	62.6	20.1-121		%REC	1	7/27/2012 7:18:12 PM
Surr: 2-Fluorobiphenyl	56.3	19-133		%REC	1	7/27/2012 7:18:12 PM
Surr: 2-Fluorophenol	64.9	20.2-108		%REC	1	7/27/2012 7:18:12 PM
Surr: 4-Terphenyl-d14	69.9	18.9-115		%REC	1	7/27/2012 7:18:12 PM
Surr: Nitrobenzene-d5	74.1	20.8-123		%REC	1	7/27/2012 7:18:12 PM
Surr: Phenol-d5	78.4	19.8-115		%REC	1	7/27/2012 7:18:12 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	2.9	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Toluene	14	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Ethylbenzene	7.5	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2,4-Trimethylbenzene	22	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,3,5-Trimethylbenzene	6.3	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Naphthalene	10	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1-Methylnaphthalene	21	10		mg/Kg	50	7/24/2012 1:29:07 AM
2-Methylnaphthalene	36	10		mg/Kg	50	7/24/2012 1:29:07 AM
Acetone	47	38		mg/Kg	50	7/24/2012 1:29:07 AM
Bromobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Bromoform	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Bromomethane	ND	7.5		mg/Kg	50	7/24/2012 1:29:07 AM
2-Butanone	ND	25		mg/Kg	50	7/24/2012 1:29:07 AM
Carbon disulfide	ND	25		mg/Kg	50	7/24/2012 1:29:07 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
Chlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Chloroethane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:12:00 PM
Lab ID: 1207940-007
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Chloromethane	ND	7.5		mg/Kg	50	7/24/2012 1:29:07 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Dibromomethane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
2-Hexanone	ND	25		mg/Kg	50	7/24/2012 1:29:07 AM
Isopropylbenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/24/2012 1:29:07 AM
Methylene chloride	ND	7.5		mg/Kg	50	7/24/2012 1:29:07 AM
n-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
n-Propylbenzene	3.6	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Styrene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-12 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:12:00 PM
Lab ID: 1207940-007
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Xylenes, Total	36	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%REC	50	7/24/2012 1:29:07 AM
Surr: 4-Bromofluorobenzene	92.3	70-130		%REC	50	7/24/2012 1:29:07 AM
Surr: Dibromofluoromethane	103	70-130		%REC	50	7/24/2012 1:29:07 AM
Surr: Toluene-d8	98.4	70-130		%REC	50	7/24/2012 1:29:07 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-13 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:36:00 PM
Lab ID: 1207940-008
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1000	99		mg/Kg	10	7/23/2012 7:41:16 AM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	7/23/2012 7:41:16 AM
Surr: DNOP	0	77.6-140	S	%REC	10	7/23/2012 7:41:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/30/2012 4:37:26 PM
Surr: BFB	129	84-116	S	%REC	10	7/30/2012 4:37:26 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.14	0.033		mg/Kg	1	8/2/2012 9:38:23 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:17:52 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:49:23 PM
Barium	350	10		mg/Kg	100	8/5/2012 1:41:23 PM
Beryllium	0.97	0.75		mg/Kg	5	8/4/2012 3:49:23 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:17:52 PM
Chromium	17	1.5		mg/Kg	5	8/1/2012 3:17:52 PM
Cobalt	5.7	1.5		mg/Kg	5	8/4/2012 3:49:23 PM
Iron	8400	500		mg/Kg	500	8/5/2012 1:43:37 PM
Lead	2.0	1.2		mg/Kg	5	8/4/2012 3:49:23 PM
Manganese	340	10		mg/Kg	100	8/5/2012 1:41:23 PM
Nickel	9.1	2.5		mg/Kg	5	8/4/2012 3:49:23 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:49:23 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:17:52 PM
Vanadium	26	12		mg/Kg	5	8/1/2012 3:17:52 PM
Zinc	36	12		mg/Kg	5	8/4/2012 3:49:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Aniline	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Azobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-13 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:36:00 PM
Lab ID: 1207940-008
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Carbazole	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2012 6:06:31 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Chrysene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/30/2012 6:06:31 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2012 6:06:31 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2012 6:06:31 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2012 6:06:31 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2012 6:06:31 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Fluorene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Isophorone	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
1-Methylnaphthalene	1.6	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2-Methylnaphthalene	0.81	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Naphthalene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-13 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:36:00 PM
Lab ID: 1207940-008
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2012 6:06:31 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2012 6:06:31 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2012 6:06:31 PM
Phenanthrene	1.4	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Phenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Pyrene	0.21	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Pyridine	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Surr: 2,4,6-Tribromophenol	57.8	20.1-121		%REC	1	7/30/2012 6:06:31 PM
Surr: 2-Fluorobiphenyl	58.6	19-133		%REC	1	7/30/2012 6:06:31 PM
Surr: 2-Fluorophenol	60.7	20.2-108		%REC	1	7/30/2012 6:06:31 PM
Surr: 4-Terphenyl-d14	79.7	18.9-115		%REC	1	7/30/2012 6:06:31 PM
Surr: Nitrobenzene-d5	68.2	20.8-123		%REC	1	7/30/2012 6:06:31 PM
Surr: Phenol-d5	75.4	19.8-115		%REC	1	7/30/2012 6:06:31 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Toluene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Ethylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2,4-Trimethylbenzene	3.7	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,3,5-Trimethylbenzene	1.4	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Naphthalene	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1-Methylnaphthalene	12	4.0		mg/Kg	20	7/24/2012 3:22:12 AM
2-Methylnaphthalene	13	4.0		mg/Kg	20	7/24/2012 3:22:12 AM
Acetone	ND	15		mg/Kg	20	7/24/2012 3:22:12 AM
Bromobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Bromoform	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Bromomethane	ND	3.0		mg/Kg	20	7/24/2012 3:22:12 AM
2-Butanone	ND	10		mg/Kg	20	7/24/2012 3:22:12 AM
Carbon disulfide	ND	10		mg/Kg	20	7/24/2012 3:22:12 AM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
Chlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Chloroethane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-13 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:36:00 PM
Lab ID: 1207940-008
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Chloromethane	ND	3.0		mg/Kg	20	7/24/2012 3:22:12 AM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Dibromomethane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
2-Hexanone	ND	10		mg/Kg	20	7/24/2012 3:22:12 AM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/24/2012 3:22:12 AM
Methylene chloride	ND	3.0		mg/Kg	20	7/24/2012 3:22:12 AM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Styrene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-13 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:36:00 PM
Lab ID: 1207940-008
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Xylenes, Total	2.4	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%REC	20	7/24/2012 3:22:12 AM
Surr: 4-Bromofluorobenzene	90.4	70-130		%REC	20	7/24/2012 3:22:12 AM
Surr: Dibromofluoromethane	101	70-130		%REC	20	7/24/2012 3:22:12 AM
Surr: Toluene-d8	102	70-130		%REC	20	7/24/2012 3:22:12 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207940-009 **Matrix:** SOIL

Client Sample ID: SWMU 14-13 (1.5-2.0')
Collection Date: 7/19/2012 12:45:00 PM
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1300	99		mg/Kg	10	7/22/2012 8:07:03 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	7/22/2012 8:07:03 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/22/2012 8:07:03 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	58	50		mg/Kg	10	7/30/2012 5:07:41 PM
Surr: BFB	122	84-116	S	%REC	10	7/30/2012 5:07:41 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:40:09 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:23:00 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:01:53 PM
Barium	230	0.50		mg/Kg	5	8/4/2012 4:01:53 PM
Beryllium	1.0	0.75		mg/Kg	5	8/4/2012 4:01:53 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:23:00 PM
Chromium	13	1.5		mg/Kg	5	8/1/2012 3:23:00 PM
Cobalt	5.7	1.5		mg/Kg	5	8/4/2012 4:01:53 PM
Iron	16000	500		mg/Kg	500	8/5/2012 1:48:51 PM
Lead	3.3	1.2		mg/Kg	5	8/4/2012 4:01:53 PM
Manganese	390	10		mg/Kg	100	8/5/2012 1:46:28 PM
Nickel	9.5	2.5		mg/Kg	5	8/4/2012 4:01:53 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 4:01:53 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:23:00 PM
Vanadium	23	12		mg/Kg	5	8/1/2012 3:23:00 PM
Zinc	19	12		mg/Kg	5	8/4/2012 4:01:53 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Aniline	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Azobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-13 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:45:00 PM
Lab ID: 1207940-009
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Carbazole	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2012 6:37:04 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Chrysene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/30/2012 6:37:04 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2012 6:37:04 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2012 6:37:04 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2012 6:37:04 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2012 6:37:04 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Fluorene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Isophorone	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
1-Methylnaphthalene	1.4	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2-Methylnaphthalene	2.3	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Naphthalene	0.65	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: SWMU 14-13 (1.5-2.0')
Project: SWMU NO.14
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Lab ID: 1207940-009
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2012 6:37:04 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2012 6:37:04 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2012 6:37:04 PM
Phenanthrene	0.60	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Phenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Pyridine	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Surr: 2,4,6-Tribromophenol	92.0	20.1-121		%REC	1	7/30/2012 6:37:04 PM
Surr: 2-Fluorobiphenyl	80.4	19-133		%REC	1	7/30/2012 6:37:04 PM
Surr: 2-Fluorophenol	73.8	20.2-108		%REC	1	7/30/2012 6:37:04 PM
Surr: 4-Terphenyl-d14	92.5	18.9-115		%REC	1	7/30/2012 6:37:04 PM
Surr: Nitrobenzene-d5	78.1	20.8-123		%REC	1	7/30/2012 6:37:04 PM
Surr: Phenol-d5	92.9	19.8-115		%REC	1	7/30/2012 6:37:04 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Toluene	0.61	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Ethylbenzene	1.3	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2,4-Trimethylbenzene	3.5	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,3,5-Trimethylbenzene	0.93	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Naphthalene	1.2	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1-Methylnaphthalene	2.6	2.0		mg/Kg	10	7/24/2012 12:36:59 PM
2-Methylnaphthalene	4.6	2.0		mg/Kg	10	7/24/2012 12:36:59 PM
Acetone	ND	7.5		mg/Kg	10	7/24/2012 12:36:59 PM
Bromobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Bromoform	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Bromomethane	ND	1.5		mg/Kg	10	7/24/2012 12:36:59 PM
2-Butanone	ND	5.0		mg/Kg	10	7/24/2012 12:36:59 PM
Carbon disulfide	ND	5.0		mg/Kg	10	7/24/2012 12:36:59 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
Chlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Chloroethane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-13 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:45:00 PM
Lab ID: 1207940-009
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Chloromethane	ND	1.5		mg/Kg	10	7/24/2012 12:36:59 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Dibromomethane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
2-Hexanone	ND	5.0		mg/Kg	10	7/24/2012 12:36:59 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	7/24/2012 12:36:59 PM
Methylene chloride	ND	1.5		mg/Kg	10	7/24/2012 12:36:59 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
n-Propylbenzene	0.55	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Styrene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-13 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 12:45:00 PM
Lab ID: 1207940-009
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Xylenes, Total	5.5	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%REC	10	7/24/2012 12:36:59 PM
Surr: 4-Bromofluorobenzene	83.2	70-130		%REC	10	7/24/2012 12:36:59 PM
Surr: Dibromofluoromethane	105	70-130		%REC	10	7/24/2012 12:36:59 PM
Surr: Toluene-d8	98.8	70-130		%REC	10	7/24/2012 12:36:59 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:07:00 PM
Lab ID: 1207940-010
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	7700	200		mg/Kg	20	7/23/2012 11:41:16 AM
Motor Oil Range Organics (MRO)	ND	980		mg/Kg	20	7/23/2012 11:41:16 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 11:41:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	450	100		mg/Kg	20	7/30/2012 5:37:48 PM
Surr: BFB	143	84-116	S	%REC	20	7/30/2012 5:37:48 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.33	0.033		mg/Kg	1	8/2/2012 9:41:56 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:37:59 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:37:59 PM
Barium	980	10		mg/Kg	100	8/5/2012 1:51:24 PM
Beryllium	0.93	0.75		mg/Kg	5	8/4/2012 4:04:15 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:37:59 PM
Chromium	18	1.5		mg/Kg	5	8/1/2012 3:37:59 PM
Cobalt	5.7	1.5		mg/Kg	5	8/4/2012 4:04:15 PM
Iron	16000	500		mg/Kg	500	8/5/2012 1:55:14 PM
Lead	3.3	1.2		mg/Kg	5	8/4/2012 4:04:15 PM
Manganese	350	10		mg/Kg	100	8/5/2012 1:51:24 PM
Nickel	9.1	2.5		mg/Kg	5	8/4/2012 4:04:15 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:37:59 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:04:15 PM
Vanadium	27	12		mg/Kg	5	8/1/2012 3:37:59 PM
Zinc	34	12		mg/Kg	5	8/4/2012 4:04:15 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM

Qualifiers:

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2012 7:07:36 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/30/2012 7:07:36 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2012 7:07:36 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 7:07:36 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
1-Methylnaphthalene	18	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2-Methylnaphthalene	28	5.0		mg/Kg	5	7/31/2012 1:08:09 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Naphthalene	3.7	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:07:00 PM
Lab ID: 1207940-010
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 7:07:36 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2012 7:07:36 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 7:07:36 PM
Phenanthrene	6.6	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Pyrene	1.0	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Surr: 2,4,6-Tribromophenol	37.8	20.1-121		%REC	1	7/30/2012 7:07:36 PM
Surr: 2-Fluorobiphenyl	55.3	19-133		%REC	1	7/30/2012 7:07:36 PM
Surr: 2-Fluorophenol	38.2	20.2-108		%REC	1	7/30/2012 7:07:36 PM
Surr: 4-Terphenyl-d14	75.4	18.9-115		%REC	1	7/30/2012 7:07:36 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/30/2012 7:07:36 PM
Surr: Phenol-d5	50.0	19.8-115		%REC	1	7/30/2012 7:07:36 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Toluene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Ethylbenzene	4.3	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2,4-Trimethylbenzene	38	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,3,5-Trimethylbenzene	12	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Naphthalene	11	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1-Methylnaphthalene	31	10		mg/Kg	50	7/24/2012 5:15:17 AM
2-Methylnaphthalene	55	10		mg/Kg	50	7/24/2012 5:15:17 AM
Acetone	ND	38		mg/Kg	50	7/24/2012 5:15:17 AM
Bromobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Bromoform	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Bromomethane	ND	7.5		mg/Kg	50	7/24/2012 5:15:17 AM
2-Butanone	ND	25		mg/Kg	50	7/24/2012 5:15:17 AM
Carbon disulfide	ND	25		mg/Kg	50	7/24/2012 5:15:17 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
Chlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Chloroethane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:07:00 PM
Lab ID: 1207940-010
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Chloromethane	ND	7.5		mg/Kg	50	7/24/2012 5:15:17 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Dibromomethane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
2-Hexanone	ND	25		mg/Kg	50	7/24/2012 5:15:17 AM
Isopropylbenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/24/2012 5:15:17 AM
Methylene chloride	ND	7.5		mg/Kg	50	7/24/2012 5:15:17 AM
n-Butylbenzene	3.3	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
n-Propylbenzene	4.0	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Styrene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:07:00 PM
Lab ID: 1207940-010
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Xylenes, Total	45	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	50	7/24/2012 5:15:17 AM
Surr: 4-Bromofluorobenzene	76.0	70-130		%REC	50	7/24/2012 5:15:17 AM
Surr: Dibromofluoromethane	109	70-130		%REC	50	7/24/2012 5:15:17 AM
Surr: Toluene-d8	102	70-130		%REC	50	7/24/2012 5:15:17 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:12:00 PM
Lab ID: 1207940-011
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	2800	99		mg/Kg	10	7/22/2012 9:34:51 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	7/22/2012 9:34:51 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/22/2012 9:34:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/30/2012 6:07:52 PM
Surr: BFB	96.8	84-116		%REC	20	7/30/2012 6:07:52 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:43:43 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:42:54 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:42:54 PM
Barium	190	0.50		mg/Kg	5	8/4/2012 4:06:36 PM
Beryllium	1.0	0.75		mg/kg	5	8/15/2012 8:29:04 AM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:42:54 PM
Chromium	11	1.5		mg/Kg	5	8/1/2012 3:42:54 PM
Cobalt	4.9	1.5		mg/Kg	5	8/4/2012 4:06:36 PM
Iron	14000	500		mg/Kg	500	8/5/2012 1:57:49 PM
Lead	2.9	1.2		mg/Kg	5	8/4/2012 4:06:36 PM
Manganese	240	0.50		mg/Kg	5	8/4/2012 4:06:36 PM
Nickel	8.1	2.5		mg/Kg	5	8/4/2012 4:06:36 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:42:54 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:06:36 PM
Vanadium	21	12		mg/Kg	5	8/1/2012 3:42:54 PM
Zinc	19	12		mg/Kg	5	8/4/2012 4:06:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Acenaphthylene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Aniline	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Anthracene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Azobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:12:00 PM
Lab ID: 1207940-011
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Carbazole	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2012 7:38:08 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Chrysene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/30/2012 7:38:08 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Dibenzofuran	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2012 7:38:08 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 7:38:08 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 7:38:08 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 7:38:08 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
Fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Fluorene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Hexachloroethane	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
1-Methylnaphthalene	17	5.0		mg/Kg	5	7/31/2012 1:38:27 PM
2-Methylnaphthalene	27	5.0		mg/Kg	5	7/31/2012 1:38:27 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Naphthalene	4.3	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:12:00 PM
Lab ID: 1207940-011
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 7:38:08 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2012 7:38:08 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 7:38:08 PM
Phenanthrene	6.2	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Phenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Pyrene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Surr: 2,4,6-Tribromophenol	91.6	20.1-121		%REC	1	7/30/2012 7:38:08 PM
Surr: 2-Fluorobiphenyl	99.9	19-133		%REC	1	7/30/2012 7:38:08 PM
Surr: 2-Fluorophenol	105	20.2-108		%REC	1	7/30/2012 7:38:08 PM
Surr: 4-Terphenyl-d14	120	18.9-115	S	%REC	1	7/30/2012 7:38:08 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/30/2012 7:38:08 PM
Surr: Phenol-d5	122	19.8-115	S	%REC	1	7/30/2012 7:38:08 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	0.84	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Toluene	0.83	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Ethylbenzene	1.7	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2,4-Trimethylbenzene	4.8	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,3,5-Trimethylbenzene	0.87	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Naphthalene	1.4	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1-Methylnaphthalene	3.3	2.0		mg/Kg	10	7/24/2012 1:33:50 PM
2-Methylnaphthalene	6.1	2.0		mg/Kg	10	7/24/2012 1:33:50 PM
Acetone	ND	7.5		mg/Kg	10	7/24/2012 1:33:50 PM
Bromobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Bromoform	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Bromomethane	ND	1.5		mg/Kg	10	7/24/2012 1:33:50 PM
2-Butanone	ND	5.0		mg/Kg	10	7/24/2012 1:33:50 PM
Carbon disulfide	ND	5.0		mg/Kg	10	7/24/2012 1:33:50 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
Chlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Chloroethane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:12:00 PM
Lab ID: 1207940-011
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Chloromethane	ND	1.5		mg/Kg	10	7/24/2012 1:33:50 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Dibromomethane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
2-Hexanone	ND	5.0		mg/Kg	10	7/24/2012 1:33:50 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	7/24/2012 1:33:50 PM
Methylene chloride	ND	1.5		mg/Kg	10	7/24/2012 1:33:50 PM
n-Butylbenzene	0.51	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
n-Propylbenzene	0.73	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Styrene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-14 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:12:00 PM
Lab ID: 1207940-011
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Xylenes, Total	5.3	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	10	7/24/2012 1:33:50 PM
Surr: 4-Bromofluorobenzene	81.7	70-130		%REC	10	7/24/2012 1:33:50 PM
Surr: Dibromofluoromethane	110	70-130		%REC	10	7/24/2012 1:33:50 PM
Surr: Toluene-d8	103	70-130		%REC	10	7/24/2012 1:33:50 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:33:00 PM
Lab ID: 1207940-012
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	350	9.7		mg/Kg	1	7/23/2012 1:01:37 PM
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	7/23/2012 1:01:37 PM
Surr: DNOP	108	77.6-140		%REC	1	7/23/2012 1:01:37 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/30/2012 6:38:08 PM
Surr: BFB	105	84-116		%REC	5	7/30/2012 6:38:08 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.14	0.033		mg/Kg	1	8/2/2012 9:45:29 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:48:04 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:48:04 PM
Barium	590	2.0		mg/Kg	20	8/5/2012 2:00:21 PM
Beryllium	0.83	0.75		mg/kg	5	8/15/2012 8:33:02 AM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:48:04 PM
Chromium	21	1.5		mg/Kg	5	8/1/2012 3:48:04 PM
Cobalt	5.4	1.5		mg/Kg	5	8/4/2012 4:09:00 PM
Iron	14000	500		mg/Kg	500	8/5/2012 2:10:31 PM
Lead	7.0	1.2		mg/Kg	5	8/4/2012 4:09:00 PM
Manganese	550	2.0		mg/Kg	20	8/5/2012 2:00:21 PM
Nickel	9.7	2.5		mg/Kg	5	8/4/2012 4:09:00 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:48:04 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:09:00 PM
Vanadium	25	12		mg/Kg	5	8/1/2012 3:48:04 PM
Zinc	59	12		mg/Kg	5	8/4/2012 4:09:00 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:33:00 PM
Lab ID: 1207940-012
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2012 8:08:37 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/30/2012 8:08:37 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2012 8:08:37 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 8:08:37 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Naphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:33:00 PM
Lab ID: 1207940-012
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 8:08:37 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2012 8:08:37 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 8:08:37 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Surr: 2,4,6-Tribromophenol	95.1	20.1-121		%REC	1	7/30/2012 8:08:37 PM
Surr: 2-Fluorobiphenyl	89.2	19-133		%REC	1	7/30/2012 8:08:37 PM
Surr: 2-Fluorophenol	80.1	20.2-108		%REC	1	7/30/2012 8:08:37 PM
Surr: 4-Terphenyl-d14	108	18.9-115		%REC	1	7/30/2012 8:08:37 PM
Surr: Nitrobenzene-d5	97.0	20.8-123		%REC	1	7/30/2012 8:08:37 PM
Surr: Phenol-d5	84.8	19.8-115		%REC	1	7/30/2012 8:08:37 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Toluene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Ethylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Xylenes, Total	ND	2.93		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Methyl tert-butyl ether (MTBE)	ND	1.95		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2,4-Trimethylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,3,5-Trimethylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dichloroethane (EDC)	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dibromoethane (EDB)	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Naphthalene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1-Methylnaphthalene	ND	3.90		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2-Methylnaphthalene	ND	3.90		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Acetone	ND	29.3		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Bromobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Bromodichloromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Bromoform	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2-Butanone	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Carbon tetrachloride	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Chlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Chloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Chloroform	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:33:00 PM
Lab ID: 1207940-012
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2-Chlorotoluene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Carbon disulfide	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
4-Chlorotoluene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
cis-1,2-DCE	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
cis-1,3-Dichloropropene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dibromo-3-chloropropane	ND	1.95		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Dibromochloromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Dibromomethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,3-Dichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,4-Dichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Dichlorodifluoromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1-Dichloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1-Dichloroethene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dichloropropane	ND	1.95		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,3-Dichloropropane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2,2-Dichloropropane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1-Dichloropropene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Hexachlorobutadiene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Isopropylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
4-Isopropyltoluene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Methylene chloride	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
n-Butylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2-Hexanone	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
n-Propylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
sec-Butylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Styrene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
4-Methyl-2-pentanone	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
tert-Butylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1,1,2-Tetrachloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1,2,2-Tetrachloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Tetrachloroethene (PCE)	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
trans-1,2-DCE	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
trans-1,3-Dichloropropene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2,3-Trichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2,4-Trichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1,1-Trichloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1,2-Trichloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Trichloroethene (TCE)	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Trichlorofluoromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2,3-Trichloropropane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:33:00 PM
Lab ID: 1207940-012
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	7/26/2012 9:21:01 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	7/26/2012 9:21:01 PM
Surr: Dibromofluoromethane	86.3	70-130		%REC	1	7/26/2012 9:21:01 PM
Surr: Toluene-d8	93.5	70-130		%REC	1	7/26/2012 9:21:01 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:38:00 PM
Lab ID: 1207940-013
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	350	10		mg/Kg	1	7/23/2012 1:27:14 PM
Motor Oil Range Organics (MRO)	80	51		mg/Kg	1	7/23/2012 1:27:14 PM
Surr: DNOP	112	77.6-140		%REC	1	7/23/2012 1:27:14 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	27	25		mg/Kg	5	7/30/2012 7:08:15 PM
Surr: BFB	130	84-116	S	%REC	5	7/30/2012 7:08:15 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.058	0.033		mg/Kg	1	8/2/2012 9:50:48 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:53:08 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:53:08 PM
Barium	620	2.0		mg/Kg	20	8/5/2012 2:13:07 PM
Beryllium	0.84	0.75		mg/kg	5	8/15/2012 8:36:01 AM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:53:08 PM
Chromium	17	1.5		mg/Kg	5	8/1/2012 3:53:08 PM
Cobalt	4.9	1.5		mg/Kg	5	8/4/2012 4:11:21 PM
Iron	15000	500		mg/Kg	500	8/5/2012 2:15:18 PM
Lead	5.8	1.2		mg/Kg	5	8/4/2012 4:11:21 PM
Manganese	700	2.0		mg/Kg	20	8/5/2012 2:13:07 PM
Nickel	7.9	2.5		mg/Kg	5	8/4/2012 4:11:21 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:53:08 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:11:21 PM
Vanadium	24	12		mg/Kg	5	8/1/2012 3:53:08 PM
Zinc	38	12		mg/Kg	5	8/4/2012 4:11:21 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:38:00 PM
Lab ID: 1207940-013
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2012 8:39:02 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/30/2012 8:39:02 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2012 8:39:02 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 8:39:02 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Naphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:38:00 PM
Lab ID: 1207940-013
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 8:39:02 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2012 8:39:02 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 8:39:02 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Surr: 2,4,6-Tribromophenol	95.2	20.1-121		%REC	1	7/30/2012 8:39:02 PM
Surr: 2-Fluorobiphenyl	92.3	19-133		%REC	1	7/30/2012 8:39:02 PM
Surr: 2-Fluorophenol	87.8	20.2-108		%REC	1	7/30/2012 8:39:02 PM
Surr: 4-Terphenyl-d14	106	18.9-115		%REC	1	7/30/2012 8:39:02 PM
Surr: Nitrobenzene-d5	99.5	20.8-123		%REC	1	7/30/2012 8:39:02 PM
Surr: Phenol-d5	86.6	19.8-115		%REC	1	7/30/2012 8:39:02 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Toluene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Ethylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Xylenes, Total	ND	3.75		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Methyl tert-butyl ether (MTBE)	ND	2.50		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2,4-Trimethylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,3,5-Trimethylbenzene	7.26	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dichloroethane (EDC)	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dibromoethane (EDB)	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Naphthalene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1-Methylnaphthalene	15.2	5.00		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2-Methylnaphthalene	ND	5.00		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Acetone	ND	37.5		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Bromobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Bromodichloromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Bromoform	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2-Butanone	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Carbon tetrachloride	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Chlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Chloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Chloroform	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:38:00 PM
Lab ID: 1207940-013
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2-Chlorotoluene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Carbon disulfide	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
4-Chlorotoluene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
cis-1,2-DCE	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
cis-1,3-Dichloropropene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dibromo-3-chloropropane	ND	2.50		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Dibromochloromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Dibromomethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,3-Dichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,4-Dichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Dichlorodifluoromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1-Dichloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1-Dichloroethene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dichloropropane	ND	2.50		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,3-Dichloropropane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2,2-Dichloropropane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1-Dichloropropene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Hexachlorobutadiene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Isopropylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
4-Isopropyltoluene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Methylene chloride	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
n-Butylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2-Hexanone	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
n-Propylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
sec-Butylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Styrene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
4-Methyl-2-pentanone	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
tert-Butylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1,1,2-Tetrachloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1,2,2-Tetrachloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Tetrachloroethene (PCE)	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
trans-1,2-DCE	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
trans-1,3-Dichloropropene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2,3-Trichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2,4-Trichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1,1-Trichloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1,2-Trichloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Trichloroethene (TCE)	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Trichlorofluoromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2,3-Trichloropropane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-11 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 1:38:00 PM
Lab ID: 1207940-013
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Surr: 1,2-Dichloroethane-d4	187	70-130	S	%REC	1	7/26/2012 9:48:36 PM
Surr: 4-Bromofluorobenzene	154	70-130	S	%REC	1	7/26/2012 9:48:36 PM
Surr: Dibromofluoromethane	87.3	70-130		%REC	1	7/26/2012 9:48:36 PM
Surr: Toluene-d8	99.6	70-130		%REC	1	7/26/2012 9:48:36 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:08:00 PM
Lab ID: 1207940-014
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1200	96		mg/Kg	10	7/23/2012 3:37:11 PM
Motor Oil Range Organics (MRO)	680	480		mg/Kg	10	7/23/2012 3:37:11 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/23/2012 3:37:11 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/30/2012 7:38:29 PM
Surr: BFB	108	84-116		%REC	10	7/30/2012 7:38:29 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.20	0.033		mg/Kg	1	8/2/2012 9:52:34 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 3:58:16 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:58:16 PM
Barium	620	2.0		mg/Kg	20	8/5/2012 2:17:56 PM
Beryllium	0.86	0.75		mg/kg	5	8/15/2012 8:38:55 AM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:58:16 PM
Chromium	25	1.5		mg/Kg	5	8/1/2012 3:58:16 PM
Cobalt	5.2	1.5		mg/Kg	5	8/4/2012 4:13:45 PM
Iron	16000	500		mg/Kg	500	8/5/2012 2:20:11 PM
Lead	10	1.2		mg/Kg	5	8/4/2012 4:13:45 PM
Manganese	580	2.0		mg/Kg	20	8/5/2012 2:17:56 PM
Nickel	8.5	2.5		mg/Kg	5	8/4/2012 4:13:45 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:58:16 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:13:45 PM
Vanadium	30	12		mg/Kg	5	8/1/2012 3:58:16 PM
Zinc	68	12		mg/Kg	5	8/4/2012 4:13:45 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Acenaphthylene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Aniline	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Anthracene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Azobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:08:00 PM
Lab ID: 1207940-014
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Carbazole	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2012 9:09:24 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Chrysene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/30/2012 9:09:24 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Dibenzofuran	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2012 9:09:24 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:09:24 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 9:09:24 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 9:09:24 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
Fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Fluorene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Hexachloroethane	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Naphthalene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:08:00 PM
Lab ID: 1207940-014
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 9:09:24 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2012 9:09:24 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:09:24 PM
Phenanthrene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Phenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Pyrene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Surr: 2,4,6-Tribromophenol	90.2	20.1-121		%REC	1	7/30/2012 9:09:24 PM
Surr: 2-Fluorobiphenyl	82.9	19-133		%REC	1	7/30/2012 9:09:24 PM
Surr: 2-Fluorophenol	75.6	20.2-108		%REC	1	7/30/2012 9:09:24 PM
Surr: 4-Terphenyl-d14	97.7	18.9-115		%REC	1	7/30/2012 9:09:24 PM
Surr: Nitrobenzene-d5	84.3	20.8-123		%REC	1	7/30/2012 9:09:24 PM
Surr: Phenol-d5	80.1	19.8-115		%REC	1	7/30/2012 9:09:24 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Toluene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Ethylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Xylenes, Total	ND	3.27		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Methyl tert-butyl ether (MTBE)	ND	2.18		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2,4-Trimethylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,3,5-Trimethylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dichloroethane (EDC)	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dibromoethane (EDB)	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Naphthalene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1-Methylnaphthalene	ND	4.36		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2-Methylnaphthalene	ND	4.36		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Acetone	ND	32.7		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Bromobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Bromodichloromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Bromoform	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2-Butanone	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Carbon tetrachloride	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Chlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Chloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Chloroform	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:08:00 PM
Lab ID: 1207940-014
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2-Chlorotoluene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Carbon disulfide	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
4-Chlorotoluene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
cis-1,2-DCE	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
cis-1,3-Dichloropropene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dibromo-3-chloropropane	ND	2.18		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Dibromochloromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Dibromomethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,3-Dichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,4-Dichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Dichlorodifluoromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1-Dichloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1-Dichloroethene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dichloropropane	ND	2.18		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,3-Dichloropropane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2,2-Dichloropropane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1-Dichloropropene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Hexachlorobutadiene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Isopropylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
4-Isopropyltoluene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Methylene chloride	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
n-Butylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2-Hexanone	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
n-Propylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
sec-Butylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Styrene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
4-Methyl-2-pentanone	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
tert-Butylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1,1,2-Tetrachloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1,2,2-Tetrachloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Tetrachloroethene (PCE)	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
trans-1,2-DCE	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
trans-1,3-Dichloropropene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2,3-Trichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2,4-Trichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1,1-Trichloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1,2-Trichloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Trichloroethene (TCE)	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Trichlorofluoromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2,3-Trichloropropane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:08:00 PM
Lab ID: 1207940-014
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Surr: 1,2-Dichloroethane-d4	180	70-130	S	%REC	1	7/26/2012 10:43:57 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	1	7/26/2012 10:43:57 PM
Surr: Dibromofluoromethane	79.8	70-130		%REC	1	7/26/2012 10:43:57 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	7/26/2012 10:43:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:15:00 PM
Lab ID: 1207940-015 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	14000	510		mg/Kg	50	7/23/2012 2:15:26 PM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	7/23/2012 2:15:26 PM
Surr: DNOP	0	77.6-140	S	%REC	50	7/23/2012 2:15:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	570	500		mg/Kg	100	7/30/2012 8:08:47 PM
Surr: BFB	119	84-116	S	%REC	100	7/30/2012 8:08:47 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.15	0.033		mg/Kg	1	8/2/2012 9:54:21 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 4:15:18 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:16:06 PM
Barium	680	2.0		mg/Kg	20	8/5/2012 2:22:47 PM
Beryllium	0.76	0.75		mg/Kg	5	8/4/2012 4:16:06 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:15:18 PM
Chromium	26	1.5		mg/Kg	5	8/1/2012 4:15:18 PM
Cobalt	5.5	1.5		mg/Kg	5	8/4/2012 4:16:06 PM
Iron	15000	500		mg/Kg	500	8/5/2012 2:24:54 PM
Lead	14	1.2		mg/Kg	5	8/4/2012 4:16:06 PM
Manganese	540	2.0		mg/Kg	20	8/5/2012 2:22:47 PM
Nickel	8.9	2.5		mg/Kg	5	8/4/2012 4:16:06 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:15:18 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:16:06 PM
Vanadium	26	12		mg/Kg	5	8/1/2012 4:15:18 PM
Zinc	65	12		mg/Kg	5	8/4/2012 4:16:06 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Acenaphthylene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Aniline	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Anthracene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Azobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzoic acid	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:15:00 PM
Lab ID: 1207940-015
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Carbazole	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/30/2012 9:39:42 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Chrysene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 9:39:42 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Dibenzofuran	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/30/2012 9:39:42 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/30/2012 9:39:42 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
Fluoranthene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Fluorene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Hexachloroethane	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Isophorone	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
1-Methylnaphthalene	4.5	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Methylnaphthalene	7.0	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Methylphenol	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Naphthalene	2.8	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:15:00 PM
Lab ID: 1207940-015
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	7/30/2012 9:39:42 PM
Nitrobenzene	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	7/30/2012 9:39:42 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	7/30/2012 9:39:42 PM
Phenanthrene	2.2	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Phenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Pyrene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Pyridine	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Surr: 2,4,6-Tribromophenol	0	20.1-121	S	%REC	1	7/30/2012 9:39:42 PM
Surr: 2-Fluorobiphenyl	48.1	19-133		%REC	1	7/30/2012 9:39:42 PM
Surr: 2-Fluorophenol	28.9	20.2-108		%REC	1	7/30/2012 9:39:42 PM
Surr: 4-Terphenyl-d14	50.7	18.9-115		%REC	1	7/30/2012 9:39:42 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/30/2012 9:39:42 PM
Surr: Phenol-d5	33.1	19.8-115		%REC	1	7/30/2012 9:39:42 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Toluene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Ethylbenzene	17	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2,4-Trimethylbenzene	37	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,3,5-Trimethylbenzene	13	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Naphthalene	8.8	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1-Methylnaphthalene	12	10		mg/Kg	50	7/24/2012 7:08:15 AM
2-Methylnaphthalene	20	10		mg/Kg	50	7/24/2012 7:08:15 AM
Acetone	ND	38		mg/Kg	50	7/24/2012 7:08:15 AM
Bromobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Bromoform	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Bromomethane	ND	7.5		mg/Kg	50	7/24/2012 7:08:15 AM
2-Butanone	ND	25		mg/Kg	50	7/24/2012 7:08:15 AM
Carbon disulfide	ND	25		mg/Kg	50	7/24/2012 7:08:15 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
Chlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Chloroethane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:15:00 PM
Lab ID: 1207940-015
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Chloromethane	ND	7.5		mg/Kg	50	7/24/2012 7:08:15 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Dibromomethane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
2-Hexanone	ND	25		mg/Kg	50	7/24/2012 7:08:15 AM
Isopropylbenzene	3.5	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/24/2012 7:08:15 AM
Methylene chloride	ND	7.5		mg/Kg	50	7/24/2012 7:08:15 AM
n-Butylbenzene	2.8	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
n-Propylbenzene	5.7	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Styrene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-18 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 2:15:00 PM
Lab ID: 1207940-015
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Xylenes, Total	53	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%REC	50	7/24/2012 7:08:15 AM
Surr: 4-Bromofluorobenzene	86.1	70-130		%REC	50	7/24/2012 7:08:15 AM
Surr: Dibromofluoromethane	108	70-130		%REC	50	7/24/2012 7:08:15 AM
Surr: Toluene-d8	104	70-130		%REC	50	7/24/2012 7:08:15 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-016
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	300	10		mg/Kg	1	7/23/2012 12:03:58 PM
Motor Oil Range Organics (MRO)	240	51		mg/Kg	1	7/23/2012 12:03:58 PM
Surr: DNOP	120	77.6-140		%REC	1	7/23/2012 12:03:58 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	20		mg/Kg	4	7/30/2012 8:38:54 PM
Surr: BFB	107	84-116		%REC	4	7/30/2012 8:38:54 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.27	0.033		mg/Kg	1	8/2/2012 9:56:09 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 4:20:29 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:18:27 PM
Barium	490	2.0		mg/Kg	20	8/5/2012 2:29:09 PM
Beryllium	ND	0.75		mg/Kg	5	8/4/2012 4:18:27 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:20:29 PM
Chromium	63	1.5		mg/Kg	5	8/1/2012 4:20:29 PM
Cobalt	5.3	1.5		mg/Kg	5	8/4/2012 4:18:27 PM
Iron	18000	500		mg/Kg	500	8/5/2012 2:31:23 PM
Lead	14	1.2		mg/Kg	5	8/4/2012 4:18:27 PM
Manganese	550	2.0		mg/Kg	20	8/5/2012 2:29:09 PM
Nickel	9.8	2.5		mg/Kg	5	8/4/2012 4:18:27 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:20:29 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:18:27 PM
Vanadium	26	12		mg/Kg	5	8/1/2012 4:20:29 PM
Zinc	190	12		mg/Kg	5	8/4/2012 4:18:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-016
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2012 10:09:54 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/30/2012 10:09:54 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2012 10:09:54 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 10:09:54 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Naphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-016
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 10:09:54 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2012 10:09:54 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 10:09:54 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Surr: 2,4,6-Tribromophenol	77.6	20.1-121		%REC	1	7/30/2012 10:09:54 PM
Surr: 2-Fluorobiphenyl	77.9	19-133		%REC	1	7/30/2012 10:09:54 PM
Surr: 2-Fluorophenol	68.0	20.2-108		%REC	1	7/30/2012 10:09:54 PM
Surr: 4-Terphenyl-d14	76.2	18.9-115		%REC	1	7/30/2012 10:09:54 PM
Surr: Nitrobenzene-d5	76.9	20.8-123		%REC	1	7/30/2012 10:09:54 PM
Surr: Phenol-d5	67.6	19.8-115		%REC	1	7/30/2012 10:09:54 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Toluene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Ethylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Xylenes, Total	ND	3.68		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Methyl tert-butyl ether (MTBE)	ND	2.45		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2,4-Trimethylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,3,5-Trimethylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dichloroethane (EDC)	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dibromoethane (EDB)	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Naphthalene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1-Methylnaphthalene	ND	4.90		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2-Methylnaphthalene	ND	4.90		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Acetone	ND	36.8		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Bromobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Bromodichloromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Bromoform	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2-Butanone	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Carbon tetrachloride	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Chlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Chloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Chloroform	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-016
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2-Chlorotoluene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Carbon disulfide	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
4-Chlorotoluene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
cis-1,2-DCE	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
cis-1,3-Dichloropropene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dibromo-3-chloropropane	ND	2.45		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Dibromochloromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Dibromomethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,3-Dichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,4-Dichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Dichlorodifluoromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1-Dichloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1-Dichloroethene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dichloropropane	ND	2.45		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,3-Dichloropropane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2,2-Dichloropropane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1-Dichloropropene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Hexachlorobutadiene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Isopropylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
4-Isopropyltoluene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Methylene chloride	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
n-Butylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2-Hexanone	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
n-Propylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
sec-Butylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Styrene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
4-Methyl-2-pentanone	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
tert-Butylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1,1,2-Tetrachloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1,2,2-Tetrachloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Tetrachloroethene (PCE)	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
trans-1,2-DCE	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
trans-1,3-Dichloropropene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2,3-Trichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2,4-Trichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1,1-Trichloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1,2-Trichloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Trichloroethene (TCE)	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Trichlorofluoromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2,3-Trichloropropane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-016
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Surr: 1,2-Dichloroethane-d4	179	70-130	S	%REC	1	7/26/2012 11:11:45 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	7/26/2012 11:11:45 PM
Surr: Dibromofluoromethane	85.3	70-130		%REC	1	7/26/2012 11:11:45 PM
Surr: Toluene-d8	97.3	70-130		%REC	1	7/26/2012 11:11:45 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-017
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	280	9.8		mg/Kg	1	7/23/2012 1:53:07 PM
Motor Oil Range Organics (MRO)	220	49		mg/Kg	1	7/23/2012 1:53:07 PM
Surr: DNOP	112	77.6-140		%REC	1	7/23/2012 1:53:07 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	20		mg/Kg	4	7/31/2012 12:40:15 AM
Surr: BFB	101	84-116		%REC	4	7/31/2012 12:40:15 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.23	0.033		mg/Kg	1	8/2/2012 9:57:56 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 4:25:31 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:20:48 PM
Barium	460	2.0		mg/Kg	20	8/5/2012 2:33:58 PM
Beryllium	ND	0.75		mg/Kg	5	8/4/2012 4:20:48 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:25:31 PM
Chromium	29	1.5		mg/Kg	5	8/1/2012 4:25:31 PM
Cobalt	3.9	1.5		mg/Kg	5	8/4/2012 4:20:48 PM
Iron	12000	500		mg/Kg	500	8/5/2012 2:44:11 PM
Lead	9.9	1.2		mg/Kg	5	8/4/2012 4:20:48 PM
Manganese	870	2.0		mg/Kg	20	8/5/2012 2:33:58 PM
Nickel	7.1	2.5		mg/Kg	5	8/4/2012 4:20:48 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:25:31 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:20:48 PM
Vanadium	19	12		mg/Kg	5	8/1/2012 4:25:31 PM
Zinc	160	12		mg/Kg	5	8/4/2012 4:20:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-017
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2012 10:40:02 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/30/2012 10:40:02 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2012 10:40:02 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 10:40:02 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Naphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-017
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 10:40:02 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2012 10:40:02 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 10:40:02 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Surr: 2,4,6-Tribromophenol	89.3	20.1-121		%REC	1	7/30/2012 10:40:02 PM
Surr: 2-Fluorobiphenyl	81.6	19-133		%REC	1	7/30/2012 10:40:02 PM
Surr: 2-Fluorophenol	78.7	20.2-108		%REC	1	7/30/2012 10:40:02 PM
Surr: 4-Terphenyl-d14	78.3	18.9-115		%REC	1	7/30/2012 10:40:02 PM
Surr: Nitrobenzene-d5	85.1	20.8-123		%REC	1	7/30/2012 10:40:02 PM
Surr: Phenol-d5	76.1	19.8-115		%REC	1	7/30/2012 10:40:02 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Toluene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Ethylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Xylenes, Total	ND	2.62		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Methyl tert-butyl ether (MTBE)	ND	1.75		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2,4-Trimethylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,3,5-Trimethylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dichloroethane (EDC)	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dibromoethane (EDB)	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Naphthalene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1-Methylnaphthalene	ND	3.49		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2-Methylnaphthalene	ND	3.49		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Acetone	ND	26.2		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Bromobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Bromodichloromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Bromoform	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2-Butanone	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Carbon tetrachloride	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Chlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Chloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Chloroform	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-017
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2-Chlorotoluene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Carbon disulfide	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
4-Chlorotoluene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
cis-1,2-DCE	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
cis-1,3-Dichloropropene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dibromo-3-chloropropane	ND	1.75		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Dibromochloromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Dibromomethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,3-Dichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,4-Dichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Dichlorodifluoromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1-Dichloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1-Dichloroethene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dichloropropane	ND	1.75		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,3-Dichloropropane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2,2-Dichloropropane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1-Dichloropropene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Hexachlorobutadiene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Isopropylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
4-Isopropyltoluene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Methylene chloride	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
n-Butylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2-Hexanone	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
n-Propylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
sec-Butylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Styrene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
4-Methyl-2-pentanone	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
tert-Butylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1,1,2-Tetrachloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1,2,2-Tetrachloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Tetrachloroethene (PCE)	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
trans-1,2-DCE	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
trans-1,3-Dichloropropene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2,3-Trichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2,4-Trichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1,1-Trichloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1,2-Trichloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Trichloroethene (TCE)	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Trichlorofluoromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2,3-Trichloropropane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 3:00:00 PM
Lab ID: 1207940-017
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Surr: 1,2-Dichloroethane-d4	182	70-130	S	%REC	1	7/26/2012 11:39:28 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	1	7/26/2012 11:39:28 PM
Surr: Dibromofluoromethane	85.8	70-130		%REC	1	7/26/2012 11:39:28 PM
Surr: Toluene-d8	94.2	70-130		%REC	1	7/26/2012 11:39:28 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:06:00 PM
Lab ID: 1207940-018
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	53	10		mg/Kg	1	7/23/2012 9:56:26 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/23/2012 9:56:26 AM
Surr: DNOP	108	77.6-140		%REC	1	7/23/2012 9:56:26 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/31/2012 1:10:26 AM
Surr: BFB	118	84-116	S	%REC	1	7/31/2012 1:10:26 AM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:59:44 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 4:30:33 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:23:19 PM
Barium	340	2.0		mg/Kg	20	8/5/2012 2:46:45 PM
Beryllium	ND	0.75		mg/Kg	5	8/4/2012 4:23:19 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:30:33 PM
Chromium	11	1.5		mg/Kg	5	8/1/2012 4:30:33 PM
Cobalt	4.6	1.5		mg/Kg	5	8/4/2012 4:23:19 PM
Iron	13000	500		mg/Kg	500	8/5/2012 2:48:56 PM
Lead	2.5	1.2		mg/Kg	5	8/4/2012 4:23:19 PM
Manganese	450	2.0		mg/Kg	20	8/5/2012 2:46:45 PM
Nickel	7.1	2.5		mg/Kg	5	8/4/2012 4:23:19 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:30:33 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:23:19 PM
Vanadium	26	12		mg/Kg	5	8/1/2012 4:30:33 PM
Zinc	20	12		mg/Kg	5	8/4/2012 4:23:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Aniline	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Anthracene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Azobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:06:00 PM
Lab ID: 1207940-018
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Carbazole	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2012 11:10:04 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Chrysene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/30/2012 11:10:04 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2012 11:10:04 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2012 11:10:04 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2012 11:10:04 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2012 11:10:04 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Fluorene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Isophorone	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Naphthalene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:06:00 PM
Lab ID: 1207940-018
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2012 11:10:04 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2012 11:10:04 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2012 11:10:04 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Phenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Pyrene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Pyridine	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Surr: 2,4,6-Tribromophenol	81.4	20.1-121		%REC	1	7/30/2012 11:10:04 PM
Surr: 2-Fluorobiphenyl	67.6	19-133		%REC	1	7/30/2012 11:10:04 PM
Surr: 2-Fluorophenol	59.3	20.2-108		%REC	1	7/30/2012 11:10:04 PM
Surr: 4-Terphenyl-d14	71.8	18.9-115		%REC	1	7/30/2012 11:10:04 PM
Surr: Nitrobenzene-d5	70.4	20.8-123		%REC	1	7/30/2012 11:10:04 PM
Surr: Phenol-d5	64.0	19.8-115		%REC	1	7/30/2012 11:10:04 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Toluene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Naphthalene	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/24/2012 2:30:42 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/24/2012 2:30:42 PM
Acetone	ND	0.75		mg/Kg	1	7/24/2012 2:30:42 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Bromoform	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Bromomethane	ND	0.15		mg/Kg	1	7/24/2012 2:30:42 PM
2-Butanone	ND	0.50		mg/Kg	1	7/24/2012 2:30:42 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/24/2012 2:30:42 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Chloroethane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207940-018 **Matrix:** SOIL

Client Sample ID: SWMU 14-5 (1.5-2.0')
Collection Date: 7/19/2012 3:06:00 PM
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Chloromethane	ND	0.15		mg/Kg	1	7/24/2012 2:30:42 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/24/2012 2:30:42 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/24/2012 2:30:42 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/24/2012 2:30:42 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Styrene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-5 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:06:00 PM
Lab ID: 1207940-018
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	7/24/2012 2:30:42 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	1	7/24/2012 2:30:42 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/24/2012 2:30:42 PM
Surr: Toluene-d8	105	70-130		%REC	1	7/24/2012 2:30:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:26:00 PM
Lab ID: 1207940-019
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/23/2012 2:19:03 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/23/2012 2:19:03 PM
Surr: DNOP	109	77.6-140		%REC	1	7/23/2012 2:19:03 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 2:47:18 PM
Surr: BFB	104	84-116		%REC	1	7/30/2012 2:47:18 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:01:33 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 4:35:32 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:37:38 PM
Barium	180	0.50		mg/Kg	5	8/4/2012 4:37:38 PM
Beryllium	ND	0.75		mg/Kg	5	8/4/2012 4:37:38 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:35:32 PM
Chromium	6.6	1.5		mg/Kg	5	8/1/2012 4:35:32 PM
Cobalt	3.2	1.5		mg/Kg	5	8/4/2012 4:37:38 PM
Iron	8200	500		mg/kg	500	8/15/2012 8:55:15 AM
Lead	2.2	1.2		mg/Kg	5	8/4/2012 4:37:38 PM
Manganese	300	2.0		mg/kg	20	8/15/2012 8:41:50 AM
Nickel	6.9	2.5		mg/Kg	5	8/4/2012 4:37:38 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:35:32 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:37:38 PM
Vanadium	22	12		mg/Kg	5	8/1/2012 4:35:32 PM
Zinc	18	12		mg/Kg	5	8/4/2012 4:37:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Lab ID: 1207940-019
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/31/2012 2:08:54 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/31/2012 2:08:54 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/31/2012 2:08:54 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 2:08:54 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Naphthalene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:26:00 PM
Lab ID: 1207940-019
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 2:08:54 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/31/2012 2:08:54 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 2:08:54 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Surr: 2,4,6-Tribromophenol	96.3	20.1-121		%REC	1	7/31/2012 2:08:54 PM
Surr: 2-Fluorobiphenyl	94.1	19-133		%REC	1	7/31/2012 2:08:54 PM
Surr: 2-Fluorophenol	84.0	20.2-108		%REC	1	7/31/2012 2:08:54 PM
Surr: 4-Terphenyl-d14	106	18.9-115		%REC	1	7/31/2012 2:08:54 PM
Surr: Nitrobenzene-d5	93.7	20.8-123		%REC	1	7/31/2012 2:08:54 PM
Surr: Phenol-d5	84.7	19.8-115		%REC	1	7/31/2012 2:08:54 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Toluene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Naphthalene	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/24/2012 2:59:07 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/24/2012 2:59:07 PM
Acetone	ND	0.75		mg/Kg	1	7/24/2012 2:59:07 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Bromoform	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Bromomethane	ND	0.15		mg/Kg	1	7/24/2012 2:59:07 PM
2-Butanone	ND	0.50		mg/Kg	1	7/24/2012 2:59:07 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/24/2012 2:59:07 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Chloroethane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:26:00 PM
Lab ID: 1207940-019
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Chloromethane	ND	0.15		mg/Kg	1	7/24/2012 2:59:07 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/24/2012 2:59:07 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/24/2012 2:59:07 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/24/2012 2:59:07 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Styrene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:26:00 PM
Lab ID: 1207940-019
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	1	7/24/2012 2:59:07 PM
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	1	7/24/2012 2:59:07 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/24/2012 2:59:07 PM
Surr: Toluene-d8	97.9	70-130		%REC	1	7/24/2012 2:59:07 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:33:00 PM
Lab ID: 1207940-020 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	29	9.8		mg/Kg	1	7/23/2012 4:03:03 PM
Motor Oil Range Organics (MRO)	51	49		mg/Kg	1	7/23/2012 4:03:03 PM
Surr: DNOP	110	77.6-140		%REC	1	7/23/2012 4:03:03 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 3:16:07 PM
Surr: BFB	101	84-116		%REC	1	7/30/2012 3:16:07 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.063	0.033		mg/Kg	1	8/2/2012 10:03:21 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/1/2012 2:07:41 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 2:07:41 PM
Barium	790	5.0		mg/kg	50	8/18/2012 11:41:55 AM
Beryllium	0.81	0.75		mg/Kg	5	8/1/2012 2:07:41 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:07:41 PM
Chromium	12	1.5		mg/Kg	5	8/1/2012 2:07:41 PM
Cobalt	4.8	1.5		mg/Kg	5	8/1/2012 2:07:41 PM
Iron	12000	500		mg/kg	500	8/18/2012 11:44:19 AM
Lead	4.1	1.2		mg/Kg	5	8/1/2012 2:07:41 PM
Manganese	640	5.0		mg/kg	50	8/18/2012 11:41:55 AM
Nickel	8.0	2.5		mg/Kg	5	8/1/2012 2:07:41 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 2:07:41 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:07:41 PM
Vanadium	21	12		mg/Kg	5	8/1/2012 2:07:41 PM
Zinc	34	12		mg/Kg	5	8/1/2012 2:07:41 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Acenaphthylene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Aniline	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Anthracene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Azobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzoic acid	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:33:00 PM
Lab ID: 1207940-020
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Carbazole	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
4-Chloro-3-methylphenol	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
4-Chloroaniline	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/31/2012 3:40:39 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Chrysene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Di-n-butyl phthalate	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 3:40:39 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Dibenzofuran	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/31/2012 3:40:39 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/31/2012 3:40:39 PM
4,6-Dinitro-2-methylphenol	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4-Dinitrotoluene	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
2,6-Dinitrotoluene	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
Fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Fluorene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Hexachloroethane	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Isophorone	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2-Methylphenol	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Naphthalene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:33:00 PM
Lab ID: 1207940-020 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	7/31/2012 3:40:39 PM
Nitrobenzene	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	7/31/2012 3:40:39 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	7/31/2012 3:40:39 PM
Phenanthrene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Phenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Pyrene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Pyridine	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Surr: 2,4,6-Tribromophenol	89.5	20.1-121		%REC	1	7/31/2012 3:40:39 PM
Surr: 2-Fluorobiphenyl	98.4	19-133		%REC	1	7/31/2012 3:40:39 PM
Surr: 2-Fluorophenol	93.9	20.2-108		%REC	1	7/31/2012 3:40:39 PM
Surr: 4-Terphenyl-d14	136	18.9-115	S	%REC	1	7/31/2012 3:40:39 PM
Surr: Nitrobenzene-d5	104	20.8-123		%REC	1	7/31/2012 3:40:39 PM
Surr: Phenol-d5	91.9	19.8-115		%REC	1	7/31/2012 3:40:39 PM
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Benzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Toluene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Naphthalene	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 2:29:14 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 2:29:14 PM
Acetone	ND	0.75		mg/Kg	1	7/25/2012 2:29:14 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Bromoform	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Bromomethane	ND	0.15		mg/Kg	1	7/25/2012 2:29:14 PM
2-Butanone	ND	0.50		mg/Kg	1	7/25/2012 2:29:14 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/25/2012 2:29:14 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Chloroethane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:33:00 PM
Lab ID: 1207940-020
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Chloroform	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Chloromethane	ND	0.15		mg/Kg	1	7/25/2012 2:29:14 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/25/2012 2:29:14 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/25/2012 2:29:14 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/25/2012 2:29:14 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Styrene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-19 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 3:33:00 PM
Lab ID: 1207940-020
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JDJ**
Vinyl chloride	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	7/25/2012 2:29:14 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	7/25/2012 2:29:14 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	7/25/2012 2:29:14 PM
Surr: Toluene-d8	104	70-130		%REC	1	7/25/2012 2:29:14 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:11:00 PM
Lab ID: 1207940-021
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	2900	190		mg/Kg	20	7/24/2012 3:30:47 PM
Motor Oil Range Organics (MRO)	2800	970		mg/Kg	20	7/24/2012 3:30:47 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/24/2012 3:30:47 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/30/2012 3:44:56 PM
Surr: BFB	102	84-116		%REC	5	7/30/2012 3:44:56 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	1.3	0.16		mg/Kg	5	8/2/2012 10:26:54 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:04:02 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:04:02 PM
Barium	850	5.0		mg/Kg	50	8/6/2012 4:20:43 PM
Beryllium	0.86	0.75		mg/Kg	5	8/5/2012 5:04:02 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:04:02 PM
Chromium	20	1.5		mg/Kg	5	8/5/2012 5:04:02 PM
Cobalt	5.4	1.5		mg/Kg	5	8/5/2012 5:04:02 PM
Iron	17000	500		mg/Kg	500	8/6/2012 4:23:05 PM
Lead	7.1	1.2		mg/Kg	5	8/5/2012 5:04:02 PM
Manganese	560	5.0		mg/Kg	50	8/6/2012 4:20:43 PM
Nickel	12	2.5		mg/Kg	5	8/5/2012 5:04:02 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:04:02 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:04:02 PM
Vanadium	28	12		mg/Kg	5	8/5/2012 5:04:02 PM
Zinc	230	12		mg/Kg	5	8/5/2012 5:04:02 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Acenaphthylene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Aniline	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Anthracene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Azobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzoic acid	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:11:00 PM
Lab ID: 1207940-021
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Carbazole	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
4-Chloro-3-methylphenol	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
4-Chloroaniline	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/31/2012 4:11:12 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Chrysene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Di-n-butyl phthalate	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 4:11:12 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Dibenzofuran	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
3,3´-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/31/2012 4:11:12 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/31/2012 4:11:12 PM
4,6-Dinitro-2-methylphenol	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4-Dinitrotoluene	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
2,6-Dinitrotoluene	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
Fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Fluorene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Hexachloroethane	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Isophorone	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2-Methylphenol	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Naphthalene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:11:00 PM
Lab ID: 1207940-021
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	7/31/2012 4:11:12 PM
Nitrobenzene	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	7/31/2012 4:11:12 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	7/31/2012 4:11:12 PM
Phenanthrene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Phenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Pyrene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Pyridine	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Surr: 2,4,6-Tribromophenol	118	20.1-121		%REC	1	7/31/2012 4:11:12 PM
Surr: 2-Fluorobiphenyl	101	19-133		%REC	1	7/31/2012 4:11:12 PM
Surr: 2-Fluorophenol	88.9	20.2-108		%REC	1	7/31/2012 4:11:12 PM
Surr: 4-Terphenyl-d14	130	18.9-115	S	%REC	1	7/31/2012 4:11:12 PM
Surr: Nitrobenzene-d5	104	20.8-123		%REC	1	7/31/2012 4:11:12 PM
Surr: Phenol-d5	86.7	19.8-115		%REC	1	7/31/2012 4:11:12 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	1.29	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Toluene	2.73	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Ethylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Xylenes, Total	ND	3.05		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Methyl tert-butyl ether (MTBE)	ND	2.03		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2,4-Trimethylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,3,5-Trimethylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dichloroethane (EDC)	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dibromoethane (EDB)	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Naphthalene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1-Methylnaphthalene	ND	4.07		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2-Methylnaphthalene	ND	4.07		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Acetone	ND	30.5		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Bromobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Bromodichloromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Bromoform	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2-Butanone	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Carbon tetrachloride	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Chlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Chloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Chloroform	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:11:00 PM
Lab ID: 1207940-021
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2-Chlorotoluene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Carbon disulfide	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
4-Chlorotoluene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
cis-1,2-DCE	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
cis-1,3-Dichloropropene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dibromo-3-chloropropane	ND	2.03		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Dibromochloromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Dibromomethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,3-Dichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,4-Dichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Dichlorodifluoromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1-Dichloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1-Dichloroethene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dichloropropane	ND	2.03		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,3-Dichloropropane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2,2-Dichloropropane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1-Dichloropropene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Hexachlorobutadiene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Isopropylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
4-Isopropyltoluene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Methylene chloride	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
n-Butylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2-Hexanone	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
n-Propylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
sec-Butylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Styrene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
4-Methyl-2-pentanone	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
tert-Butylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1,1,2-Tetrachloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1,2,2-Tetrachloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Tetrachloroethene (PCE)	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
trans-1,2-DCE	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
trans-1,3-Dichloropropene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2,3-Trichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2,4-Trichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1,1-Trichloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1,2-Trichloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Trichloroethene (TCE)	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Trichlorofluoromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2,3-Trichloropropane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:11:00 PM
Lab ID: 1207940-021
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Surr: 1,2-Dichloroethane-d4	188	70-130	S	%REC	1	7/27/2012 12:07:10 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	7/27/2012 12:07:10 AM
Surr: Dibromofluoromethane	88.6	70-130		%REC	1	7/27/2012 12:07:10 AM
Surr: Toluene-d8	99.4	70-130		%REC	1	7/27/2012 12:07:10 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:18:00 PM
Lab ID: 1207940-022 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	13000	500		mg/Kg	50	7/24/2012 1:53:49 PM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	7/24/2012 1:53:49 PM
Surr: DNOP	0	77.6-140	S	%REC	50	7/24/2012 1:53:49 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/30/2012 4:13:41 PM
Surr: BFB	129	84-116	S	%REC	50	7/30/2012 4:13:41 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.12	0.033		mg/Kg	1	8/2/2012 10:14:21 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:09:28 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:09:28 PM
Barium	600	5.0		mg/Kg	50	8/8/2012 9:31:51 AM
Beryllium	0.87	0.75		mg/Kg	5	8/5/2012 5:09:28 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:09:28 PM
Chromium	25	1.5		mg/Kg	5	8/5/2012 5:09:28 PM
Cobalt	5.4	1.5		mg/Kg	5	8/5/2012 5:09:28 PM
Iron	15000	500		mg/Kg	500	8/8/2012 9:34:20 AM
Lead	3.2	1.2		mg/Kg	5	8/5/2012 5:09:28 PM
Manganese	640	5.0		mg/Kg	50	8/8/2012 9:31:51 AM
Nickel	8.7	2.5		mg/Kg	5	8/5/2012 5:09:28 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:09:28 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:09:28 PM
Vanadium	27	12		mg/Kg	5	8/5/2012 5:09:28 PM
Zinc	37	12		mg/Kg	5	8/5/2012 5:09:28 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:18:00 PM
Lab ID: 1207940-022
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/31/2012 4:41:47 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/31/2012 4:41:47 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/31/2012 4:41:47 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 4:41:47 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Fluorene	3.0	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
1-Methylnaphthalene	29	5.0		mg/Kg	5	8/1/2012 7:00:40 PM
2-Methylnaphthalene	38	5.0		mg/Kg	5	8/1/2012 7:00:40 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Naphthalene	7.1	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:18:00 PM
Lab ID: 1207940-022 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 4:41:47 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/31/2012 4:41:47 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:41:47 PM
Phenanthrene	9.8	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Pyrene	2.6	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Surr: 2,4,6-Tribromophenol	0	20.1-121	S	%REC	1	7/31/2012 4:41:47 PM
Surr: 2-Fluorobiphenyl	35.8	19-133		%REC	1	7/31/2012 4:41:47 PM
Surr: 2-Fluorophenol	47.7	20.2-108		%REC	1	7/31/2012 4:41:47 PM
Surr: 4-Terphenyl-d14	59.1	18.9-115		%REC	1	7/31/2012 4:41:47 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/31/2012 4:41:47 PM
Surr: Phenol-d5	56.3	19.8-115		%REC	1	7/31/2012 4:41:47 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	1.6	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Toluene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Ethylbenzene	13	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2,4-Trimethylbenzene	33	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,3,5-Trimethylbenzene	7.8	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Naphthalene	17	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1-Methylnaphthalene	38	4.0		mg/Kg	20	7/30/2012 3:17:50 PM
2-Methylnaphthalene	60	4.0		mg/Kg	20	7/30/2012 3:17:50 PM
Acetone	ND	15		mg/Kg	20	7/30/2012 3:17:50 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Bromoform	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Bromomethane	ND	3.0		mg/Kg	20	7/30/2012 3:17:50 PM
2-Butanone	ND	10		mg/Kg	20	7/30/2012 3:17:50 PM
Carbon disulfide	ND	10		mg/Kg	20	7/30/2012 3:17:50 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Chloroethane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:18:00 PM
Lab ID: 1207940-022
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Chloroform	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Chloromethane	ND	3.0		mg/Kg	20	7/30/2012 3:17:50 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
2-Hexanone	ND	10		mg/Kg	20	7/30/2012 3:17:50 PM
Isopropylbenzene	2.9	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
4-Isopropyltoluene	2.7	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/30/2012 3:17:50 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/30/2012 3:17:50 PM
n-Butylbenzene	4.6	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
n-Propylbenzene	4.9	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
sec-Butylbenzene	2.9	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Styrene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1,2-Trichloroethane	1.0	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-17 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:18:00 PM
Lab ID: 1207940-022
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Vinyl chloride	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Xylenes, Total	14	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%REC	20	7/30/2012 3:17:50 PM
Surr: 4-Bromofluorobenzene	66.9	70-130	S	%REC	20	7/30/2012 3:17:50 PM
Surr: Dibromofluoromethane	90.6	70-130		%REC	20	7/30/2012 3:17:50 PM
Surr: Toluene-d8	101	70-130		%REC	20	7/30/2012 3:17:50 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:45:00 PM
Lab ID: 1207940-023 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	480	49		mg/Kg	5	7/24/2012 3:08:41 PM
Motor Oil Range Organics (MRO)	480	240		mg/Kg	5	7/24/2012 3:08:41 PM
Surr: DNOP	0	77.6-140	S	%REC	5	7/24/2012 3:08:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/30/2012 4:42:30 PM
Surr: BFB	101	84-116		%REC	5	7/30/2012 4:42:30 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.062	0.033		mg/Kg	1	8/2/2012 10:16:09 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:11:50 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:11:50 PM
Barium	550	5.0		mg/Kg	50	8/8/2012 9:37:03 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:11:50 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:11:50 PM
Chromium	13	1.5		mg/Kg	5	8/5/2012 5:11:50 PM
Cobalt	4.4	1.5		mg/Kg	5	8/5/2012 5:11:50 PM
Iron	11000	500		mg/Kg	500	8/8/2012 9:39:29 AM
Lead	4.8	1.2		mg/Kg	5	8/5/2012 5:11:50 PM
Manganese	1100	5.0		mg/Kg	50	8/8/2012 9:37:03 AM
Nickel	6.9	2.5		mg/Kg	5	8/5/2012 5:11:50 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:11:50 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:11:50 PM
Vanadium	22	12		mg/Kg	5	8/5/2012 5:11:50 PM
Zinc	69	12		mg/Kg	5	8/5/2012 5:11:50 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:45:00 PM
Lab ID: 1207940-023
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/31/2012 5:12:23 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/31/2012 5:12:23 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/31/2012 5:12:23 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 5:12:23 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Naphthalene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:45:00 PM
Lab ID: 1207940-023
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 5:12:23 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/31/2012 5:12:23 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 5:12:23 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Surr: 2,4,6-Tribromophenol	92.8	20.1-121		%REC	1	7/31/2012 5:12:23 PM
Surr: 2-Fluorobiphenyl	84.4	19-133		%REC	1	7/31/2012 5:12:23 PM
Surr: 2-Fluorophenol	72.7	20.2-108		%REC	1	7/31/2012 5:12:23 PM
Surr: 4-Terphenyl-d14	98.2	18.9-115		%REC	1	7/31/2012 5:12:23 PM
Surr: Nitrobenzene-d5	83.0	20.8-123		%REC	1	7/31/2012 5:12:23 PM
Surr: Phenol-d5	77.1	19.8-115		%REC	1	7/31/2012 5:12:23 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Toluene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Ethylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Xylenes, Total	ND	2.72		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Methyl tert-butyl ether (MTBE)	ND	1.81		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2,4-Trimethylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,3,5-Trimethylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dichloroethane (EDC)	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dibromoethane (EDB)	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Naphthalene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1-Methylnaphthalene	ND	3.62		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2-Methylnaphthalene	ND	3.62		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Acetone	ND	27.2		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Bromobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Bromodichloromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Bromoform	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2-Butanone	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Carbon tetrachloride	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Chlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Chloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Chloroform	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:45:00 PM
Lab ID: 1207940-023
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2-Chlorotoluene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Carbon disulfide	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
4-Chlorotoluene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
cis-1,2-DCE	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
cis-1,3-Dichloropropene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dibromo-3-chloropropane	ND	1.81		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Dibromochloromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Dibromomethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,3-Dichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,4-Dichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Dichlorodifluoromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1-Dichloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1-Dichloroethene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dichloropropane	ND	1.81		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,3-Dichloropropane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2,2-Dichloropropane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1-Dichloropropene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Hexachlorobutadiene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Isopropylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
4-Isopropyltoluene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Methylene chloride	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
n-Butylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2-Hexanone	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
n-Propylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
sec-Butylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Styrene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
4-Methyl-2-pentanone	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
tert-Butylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1,1,2-Tetrachloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1,2,2-Tetrachloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Tetrachloroethene (PCE)	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
trans-1,2-DCE	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
trans-1,3-Dichloropropene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2,3-Trichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2,4-Trichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1,1-Trichloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1,2-Trichloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Trichloroethene (TCE)	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Trichlorofluoromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2,3-Trichloropropane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:45:00 PM
Lab ID: 1207940-023
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	7/27/2012 1:58:11 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	7/27/2012 1:58:11 AM
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	7/27/2012 1:58:11 AM
Surr: Toluene-d8	101	70-130		%REC	1	7/27/2012 1:58:11 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:51:00 PM
Lab ID: 1207940-024 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	4800	200		mg/Kg	20	7/24/2012 1:09:38 PM
Motor Oil Range Organics (MRO)	1100	1000		mg/Kg	20	7/24/2012 1:09:38 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/24/2012 1:09:38 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/30/2012 5:11:15 PM
Surr: BFB	102	84-116		%REC	50	7/30/2012 5:11:15 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.052	0.033		mg/Kg	1	8/2/2012 10:17:56 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:14:15 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:14:15 PM
Barium	1000	5.0		mg/Kg	50	8/8/2012 12:12:41 PM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:14:15 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:14:15 PM
Chromium	15	1.5		mg/Kg	5	8/5/2012 5:14:15 PM
Cobalt	4.5	1.5		mg/Kg	5	8/5/2012 5:14:15 PM
Iron	15000	500		mg/Kg	500	8/8/2012 12:15:05 PM
Lead	5.1	1.2		mg/Kg	5	8/5/2012 5:14:15 PM
Manganese	560	5.0		mg/Kg	50	8/8/2012 12:12:41 PM
Nickel	7.1	2.5		mg/Kg	5	8/5/2012 5:14:15 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:14:15 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:14:15 PM
Vanadium	25	12		mg/Kg	5	8/5/2012 5:14:15 PM
Zinc	25	12		mg/Kg	5	8/5/2012 5:14:15 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:51:00 PM
Lab ID: 1207940-024
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/31/2012 5:42:57 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/31/2012 5:42:57 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/31/2012 5:42:57 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 5:42:57 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
1-Methylnaphthalene	6.3	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2-Methylnaphthalene	6.1	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Naphthalene	1.4	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:51:00 PM
Lab ID: 1207940-024 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 5:42:57 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/31/2012 5:42:57 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 5:42:57 PM
Phenanthrene	1.7	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Surr: 2,4,6-Tribromophenol	89.7	20.1-121		%REC	1	7/31/2012 5:42:57 PM
Surr: 2-Fluorobiphenyl	78.4	19-133		%REC	1	7/31/2012 5:42:57 PM
Surr: 2-Fluorophenol	85.2	20.2-108		%REC	1	7/31/2012 5:42:57 PM
Surr: 4-Terphenyl-d14	102	18.9-115		%REC	1	7/31/2012 5:42:57 PM
Surr: Nitrobenzene-d5	94.4	20.8-123		%REC	1	7/31/2012 5:42:57 PM
Surr: Phenol-d5	84.8	19.8-115		%REC	1	7/31/2012 5:42:57 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Toluene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Ethylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2,4-Trimethylbenzene	3.6	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,3,5-Trimethylbenzene	1.1	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Naphthalene	3.9	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1-Methylnaphthalene	12	4.0		mg/Kg	20	7/24/2012 4:24:10 PM
2-Methylnaphthalene	9.6	4.0		mg/Kg	20	7/24/2012 4:24:10 PM
Acetone	ND	15		mg/Kg	20	7/24/2012 4:24:10 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Bromoform	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Bromomethane	ND	3.0		mg/Kg	20	7/24/2012 4:24:10 PM
2-Butanone	ND	10		mg/Kg	20	7/24/2012 4:24:10 PM
Carbon disulfide	ND	10		mg/Kg	20	7/24/2012 4:24:10 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Chloroethane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:51:00 PM
Lab ID: 1207940-024
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Chloromethane	ND	3.0		mg/Kg	20	7/24/2012 4:24:10 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
2-Hexanone	ND	10		mg/Kg	20	7/24/2012 4:24:10 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/24/2012 4:24:10 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/24/2012 4:24:10 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Styrene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-16 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 4:51:00 PM
Lab ID: 1207940-024
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	20	7/24/2012 4:24:10 PM
Surr: 4-Bromofluorobenzene	83.2	70-130		%REC	20	7/24/2012 4:24:10 PM
Surr: Dibromofluoromethane	105	70-130		%REC	20	7/24/2012 4:24:10 PM
Surr: Toluene-d8	100	70-130		%REC	20	7/24/2012 4:24:10 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:14:00 PM
Lab ID: 1207940-025
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1400	200		mg/Kg	20	7/24/2012 1:31:41 PM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/24/2012 1:31:41 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/24/2012 1:31:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/30/2012 5:39:56 PM
Surr: BFB	101	84-116		%REC	10	7/30/2012 5:39:56 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.13	0.033		mg/Kg	1	8/2/2012 10:19:43 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:18:23 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:18:23 PM
Barium	670	5.0		mg/Kg	50	8/8/2012 9:42:14 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:18:23 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:18:23 PM
Chromium	14	1.5		mg/Kg	5	8/5/2012 5:18:23 PM
Cobalt	4.7	1.5		mg/Kg	5	8/5/2012 5:18:23 PM
Iron	12000	500		mg/Kg	500	8/8/2012 9:44:39 AM
Lead	4.1	1.2		mg/Kg	5	8/5/2012 5:18:23 PM
Manganese	540	5.0		mg/Kg	50	8/8/2012 9:42:14 AM
Nickel	8.2	2.5		mg/Kg	5	8/5/2012 5:18:23 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:18:23 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:18:23 PM
Vanadium	23	12		mg/Kg	5	8/5/2012 5:18:23 PM
Zinc	140	12		mg/Kg	5	8/5/2012 5:18:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:14:00 PM
Lab ID: 1207940-025
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/31/2012 6:13:31 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/31/2012 6:13:31 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
3,3´-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/31/2012 6:13:31 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 6:13:31 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Naphthalene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:14:00 PM
Lab ID: 1207940-025
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 6:13:31 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/31/2012 6:13:31 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 6:13:31 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Surr: 2,4,6-Tribromophenol	86.8	20.1-121		%REC	1	7/31/2012 6:13:31 PM
Surr: 2-Fluorobiphenyl	82.8	19-133		%REC	1	7/31/2012 6:13:31 PM
Surr: 2-Fluorophenol	76.1	20.2-108		%REC	1	7/31/2012 6:13:31 PM
Surr: 4-Terphenyl-d14	113	18.9-115		%REC	1	7/31/2012 6:13:31 PM
Surr: Nitrobenzene-d5	83.7	20.8-123		%REC	1	7/31/2012 6:13:31 PM
Surr: Phenol-d5	80.1	19.8-115		%REC	1	7/31/2012 6:13:31 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Toluene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Ethylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Xylenes, Total	ND	2.89		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Methyl tert-butyl ether (MTBE)	ND	1.92		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2,4-Trimethylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,3,5-Trimethylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dichloroethane (EDC)	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dibromoethane (EDB)	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Naphthalene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1-Methylnaphthalene	ND	3.85		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2-Methylnaphthalene	ND	3.85		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Acetone	ND	28.9		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Bromobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Bromodichloromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Bromoform	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2-Butanone	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Carbon tetrachloride	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Chlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Chloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Chloroform	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:14:00 PM
Lab ID: 1207940-025
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2-Chlorotoluene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Carbon disulfide	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
4-Chlorotoluene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
cis-1,2-DCE	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
cis-1,3-Dichloropropene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dibromo-3-chloropropane	ND	1.92		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Dibromochloromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Dibromomethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,3-Dichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,4-Dichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Dichlorodifluoromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1-Dichloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1-Dichloroethene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dichloropropane	ND	1.92		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,3-Dichloropropane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2,2-Dichloropropane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1-Dichloropropene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Hexachlorobutadiene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Isopropylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
4-Isopropyltoluene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Methylene chloride	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
n-Butylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2-Hexanone	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
n-Propylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
sec-Butylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Styrene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
4-Methyl-2-pentanone	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
tert-Butylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1,1,2-Tetrachloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1,2,2-Tetrachloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Tetrachloroethene (PCE)	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
trans-1,2-DCE	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
trans-1,3-Dichloropropene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2,3-Trichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2,4-Trichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1,1-Trichloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1,2-Trichloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Trichloroethene (TCE)	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Trichlorofluoromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2,3-Trichloropropane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:14:00 PM
Lab ID: 1207940-025
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Surr: 1,2-Dichloroethane-d4	122	70-130		%REC	1	7/27/2012 12:34:55 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	7/27/2012 12:34:55 AM
Surr: Dibromofluoromethane	77.5	70-130		%REC	1	7/27/2012 12:34:55 AM
Surr: Toluene-d8	99.0	70-130		%REC	1	7/27/2012 12:34:55 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:19:00 PM
Lab ID: 1207940-026 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	10000	1000		mg/Kg	100	7/24/2012 2:46:24 PM
Motor Oil Range Organics (MRO)	ND	5100		mg/Kg	100	7/24/2012 2:46:24 PM
Surr: DNOP	0	77.6-140	S	%REC	100	7/24/2012 2:46:24 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1600	500		mg/Kg	100	7/30/2012 6:08:45 PM
Surr: BFB	142	84-116	S	%REC	100	7/30/2012 6:08:45 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	0.22	0.033		mg/Kg	1	8/2/2012 10:21:30 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:20:48 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:20:48 PM
Barium	650	5.0		mg/Kg	50	8/8/2012 9:47:22 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:20:48 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:20:48 PM
Chromium	8.9	1.5		mg/Kg	5	8/5/2012 5:20:48 PM
Cobalt	3.6	1.5		mg/Kg	5	8/5/2012 5:20:48 PM
Iron	7300	500		mg/Kg	500	8/8/2012 9:49:47 AM
Lead	1.3	1.2		mg/Kg	5	8/5/2012 5:20:48 PM
Manganese	360	5.0		mg/Kg	50	8/8/2012 9:47:22 AM
Nickel	5.6	2.5		mg/Kg	5	8/5/2012 5:20:48 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:20:48 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:20:48 PM
Vanadium	20	12		mg/Kg	5	8/5/2012 5:20:48 PM
Zinc	68	12		mg/Kg	5	8/5/2012 5:20:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:19:00 PM
Lab ID: 1207940-026
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/31/2012 6:44:05 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/31/2012 6:44:05 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/31/2012 6:44:05 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 6:44:05 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
1-Methylnaphthalene	4.4	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2-Methylnaphthalene	6.7	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Naphthalene	1.7	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:19:00 PM
Lab ID: 1207940-026 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 6:44:05 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/31/2012 6:44:05 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 6:44:05 PM
Phenanthrene	2.8	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Surr: 2,4,6-Tribromophenol	32.3	20.1-121		%REC	1	7/31/2012 6:44:05 PM
Surr: 2-Fluorobiphenyl	41.9	19-133		%REC	1	7/31/2012 6:44:05 PM
Surr: 2-Fluorophenol	0	20.2-108	S	%REC	1	7/31/2012 6:44:05 PM
Surr: 4-Terphenyl-d14	64.2	18.9-115		%REC	1	7/31/2012 6:44:05 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/31/2012 6:44:05 PM
Surr: Phenol-d5	39.2	19.8-115		%REC	1	7/31/2012 6:44:05 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	2.8	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Toluene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Ethylbenzene	23	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2,4-Trimethylbenzene	44	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,3,5-Trimethylbenzene	16	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Naphthalene	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1-Methylnaphthalene	ND	10		mg/Kg	50	7/24/2012 5:20:42 PM
2-Methylnaphthalene	ND	10		mg/Kg	50	7/24/2012 5:20:42 PM
Acetone	ND	38		mg/Kg	50	7/24/2012 5:20:42 PM
Bromobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Bromoform	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Bromomethane	ND	7.5		mg/Kg	50	7/24/2012 5:20:42 PM
2-Butanone	ND	25		mg/Kg	50	7/24/2012 5:20:42 PM
Carbon disulfide	ND	25		mg/Kg	50	7/24/2012 5:20:42 PM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
Chlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Chloroethane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:19:00 PM
Lab ID: 1207940-026
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Chloromethane	ND	7.5		mg/Kg	50	7/24/2012 5:20:42 PM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Dibromomethane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
2-Hexanone	ND	25		mg/Kg	50	7/24/2012 5:20:42 PM
Isopropylbenzene	6.6	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
4-Isopropyltoluene	3.4	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/24/2012 5:20:42 PM
Methylene chloride	ND	7.5		mg/Kg	50	7/24/2012 5:20:42 PM
n-Butylbenzene	3.8	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
n-Propylbenzene	8.1	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
sec-Butylbenzene	3.8	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Styrene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-15 (1.5-2.0')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:19:00 PM
Lab ID: 1207940-026
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Xylenes, Total	120	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	50	7/24/2012 5:20:42 PM
Surr: 4-Bromofluorobenzene	84.8	70-130		%REC	50	7/24/2012 5:20:42 PM
Surr: Dibromofluoromethane	113	70-130		%REC	50	7/24/2012 5:20:42 PM
Surr: Toluene-d8	107	70-130		%REC	50	7/24/2012 5:20:42 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-027
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/24/2012 9:49:16 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/24/2012 9:49:16 AM
Surr: DNOP	107	77.6-140		%REC	1	7/24/2012 9:49:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 6:37:37 PM
Surr: BFB	104	84-116		%REC	1	7/30/2012 6:37:37 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:23:17 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:31:38 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:31:38 PM
Barium	940	5.0		mg/Kg	50	8/8/2012 10:03:14 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:31:38 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:31:38 PM
Chromium	9.4	1.5		mg/Kg	5	8/5/2012 5:31:38 PM
Cobalt	5.2	3.0		mg/Kg	10	8/8/2012 11:34:09 AM
Iron	13000	500		mg/Kg	500	8/8/2012 10:05:39 AM
Lead	2.7	1.2		mg/Kg	5	8/5/2012 5:31:38 PM
Manganese	650	5.0		mg/Kg	50	8/8/2012 10:03:14 AM
Nickel	6.9	2.5		mg/Kg	5	8/5/2012 5:31:38 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:31:38 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:31:38 PM
Vanadium	21	12		mg/Kg	5	8/5/2012 5:31:38 PM
Zinc	17	12		mg/Kg	5	8/5/2012 5:31:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Aniline	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Azobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-027
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Carbazole	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/31/2012 7:14:38 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Chrysene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/31/2012 7:14:38 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/31/2012 7:14:38 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/31/2012 7:14:38 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/31/2012 7:14:38 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/31/2012 7:14:38 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Fluorene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Isophorone	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Naphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-027
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/31/2012 7:14:38 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/31/2012 7:14:38 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/31/2012 7:14:38 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Phenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Pyridine	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Surr: 2,4,6-Tribromophenol	75.9	20.1-121		%REC	1	7/31/2012 7:14:38 PM
Surr: 2-Fluorobiphenyl	64.3	19-133		%REC	1	7/31/2012 7:14:38 PM
Surr: 2-Fluorophenol	58.4	20.2-108		%REC	1	7/31/2012 7:14:38 PM
Surr: 4-Terphenyl-d14	85.2	18.9-115		%REC	1	7/31/2012 7:14:38 PM
Surr: Nitrobenzene-d5	61.7	20.8-123		%REC	1	7/31/2012 7:14:38 PM
Surr: Phenol-d5	63.1	19.8-115		%REC	1	7/31/2012 7:14:38 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Toluene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Ethylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Xylenes, Total	ND	3.44		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Methyl tert-butyl ether (MTBE)	ND	2.30		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2,4-Trimethylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,3,5-Trimethylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dichloroethane (EDC)	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dibromoethane (EDB)	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Naphthalene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1-Methylnaphthalene	ND	4.59		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2-Methylnaphthalene	ND	4.59		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Acetone	ND	34.4		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Bromobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Bromodichloromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Bromoform	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2-Butanone	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Carbon tetrachloride	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Chlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Chloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Chloroform	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-027
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2-Chlorotoluene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Carbon disulfide	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
4-Chlorotoluene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
cis-1,2-DCE	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
cis-1,3-Dichloropropene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dibromo-3-chloropropane	ND	2.30		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Dibromochloromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Dibromomethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,3-Dichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,4-Dichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Dichlorodifluoromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1-Dichloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1-Dichloroethene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dichloropropane	ND	2.30		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,3-Dichloropropane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2,2-Dichloropropane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1-Dichloropropene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Hexachlorobutadiene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Isopropylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
4-Isopropyltoluene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Methylene chloride	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
n-Butylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2-Hexanone	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
n-Propylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
sec-Butylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Styrene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
4-Methyl-2-pentanone	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
tert-Butylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1,1,2-Tetrachloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1,2,2-Tetrachloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Tetrachloroethene (PCE)	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
trans-1,2-DCE	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
trans-1,3-Dichloropropene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2,3-Trichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2,4-Trichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1,1-Trichloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1,2-Trichloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Trichloroethene (TCE)	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Trichlorofluoromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2,3-Trichloropropane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5')
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-027
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Surr: 1,2-Dichloroethane-d4	136	70-130	S	%REC	1	7/27/2012 1:02:42 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1	7/27/2012 1:02:42 AM
Surr: Dibromofluoromethane	96.0	70-130		%REC	1	7/27/2012 1:02:42 AM
Surr: Toluene-d8	92.9	70-130		%REC	1	7/27/2012 1:02:42 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-028 **Matrix:** SOIL **Received Date:** 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/24/2012 10:36:19 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/24/2012 10:36:19 AM
Surr: DNOP	111	77.6-140		%REC	1	7/24/2012 10:36:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 7:06:26 PM
Surr: BFB	101	84-116		%REC	1	7/30/2012 7:06:26 PM
EPA METHOD 7471: MERCURY						Analyst: **DBD**
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:25:06 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	8/5/2012 5:34:01 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:34:01 PM
Barium	890	5.0		mg/Kg	50	8/8/2012 10:08:22 AM
Beryllium	0.76	0.75		mg/Kg	5	8/5/2012 5:34:01 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:34:01 PM
Chromium	8.7	1.5		mg/Kg	5	8/5/2012 5:34:01 PM
Cobalt	7.0	1.5		mg/Kg	5	8/5/2012 5:34:01 PM
Iron	14000	500		mg/Kg	500	8/8/2012 10:10:49 AM
Lead	3.0	1.2		mg/Kg	5	8/5/2012 5:34:01 PM
Manganese	910	5.0		mg/Kg	50	8/8/2012 10:08:22 AM
Nickel	8.0	2.5		mg/Kg	5	8/5/2012 5:34:01 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:34:01 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:34:01 PM
Vanadium	24	12		mg/Kg	5	8/5/2012 5:34:01 PM
Zinc	22	12		mg/Kg	5	8/5/2012 5:34:01 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Aniline	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Azobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207940-028 **Matrix:** SOIL

Client Sample ID: SWMU 14-20 (0-0.5') DUP
Collection Date: 7/19/2012 5:50:00 PM
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Carbazole	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/31/2012 7:45:05 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Chrysene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/31/2012 7:45:05 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/31/2012 7:45:05 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/31/2012 7:45:05 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/31/2012 7:45:05 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/31/2012 7:45:05 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Fluorene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Isophorone	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Naphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-028
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/31/2012 7:45:05 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/31/2012 7:45:05 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/31/2012 7:45:05 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Phenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Pyridine	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Surr: 2,4,6-Tribromophenol	47.4	20.1-121		%REC	1	7/31/2012 7:45:05 PM
Surr: 2-Fluorobiphenyl	45.2	19-133		%REC	1	7/31/2012 7:45:05 PM
Surr: 2-Fluorophenol	40.4	20.2-108		%REC	1	7/31/2012 7:45:05 PM
Surr: 4-Terphenyl-d14	53.2	18.9-115		%REC	1	7/31/2012 7:45:05 PM
Surr: Nitrobenzene-d5	46.0	20.8-123		%REC	1	7/31/2012 7:45:05 PM
Surr: Phenol-d5	43.6	19.8-115		%REC	1	7/31/2012 7:45:05 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Benzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Toluene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Ethylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Xylenes, Total	ND	2.93		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Methyl tert-butyl ether (MTBE)	ND	1.96		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2,4-Trimethylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,3,5-Trimethylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dichloroethane (EDC)	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dibromoethane (EDB)	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Naphthalene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1-Methylnaphthalene	ND	3.91		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2-Methylnaphthalene	ND	3.91		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Acetone	ND	29.3		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Bromobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Bromodichloromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Bromoform	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2-Butanone	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Carbon tetrachloride	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Chlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Chloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Chloroform	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-028
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Chloromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2-Chlorotoluene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Carbon disulfide	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
4-Chlorotoluene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
cis-1,2-DCE	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
cis-1,3-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dibromo-3-chloropropane	ND	1.96		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Dibromochloromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Dibromomethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,3-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,4-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Dichlorodifluoromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1-Dichloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1-Dichloroethene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dichloropropane	ND	1.96		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,3-Dichloropropane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2,2-Dichloropropane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Hexachlorobutadiene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Isopropylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
4-Isopropyltoluene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Methylene chloride	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
n-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2-Hexanone	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
n-Propylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
sec-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Styrene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
4-Methyl-2-pentanone	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
tert-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1,1,2-Tetrachloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1,2,2-Tetrachloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Tetrachloroethene (PCE)	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
trans-1,2-DCE	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
trans-1,3-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2,3-Trichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2,4-Trichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1,1-Trichloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1,2-Trichloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Trichloroethene (TCE)	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Trichlorofluoromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2,3-Trichloropropane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-20 (0-0.5') DUP
Project: SWMU NO.14
Collection Date: 7/19/2012 5:50:00 PM
Lab ID: 1207940-028
Matrix: SOIL
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **MMS**
Vinyl chloride	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Surr: 1,2-Dichloroethane-d4	127	70-130		%REC	1	7/27/2012 1:30:26 AM
Surr: 4-Bromofluorobenzene	91.7	70-130		%REC	1	7/27/2012 1:30:26 AM
Surr: Dibromofluoromethane	96.0	70-130		%REC	1	7/27/2012 1:30:26 AM
Surr: Toluene-d8	98.4	70-130		%REC	1	7/27/2012 1:30:26 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 GW
Project: SWMU NO.14
Collection Date: 7/19/2012 10:00:00 AM
Lab ID: 1207940-029
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	6.5	1.0		mg/L	1	7/23/2012 7:51:04 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 7:51:04 PM
Surr: DNOP	132	79.5-166		%REC	1	7/23/2012 7:51:04 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1.2	0.25		mg/L	5	7/25/2012 1:33:25 PM
Surr: BFB	98.5	69.8-119		%REC	5	7/25/2012 1:33:25 PM
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**
Barium	0.18	0.0020		mg/L	1	8/15/2012 11:54:12 AM
Beryllium	ND	0.0020		mg/L	1	8/10/2012 12:09:10 PM
Cadmium	ND	0.0020		mg/L	1	8/10/2012 12:09:10 PM
Chromium	0.0077	0.0060		mg/L	1	8/10/2012 12:09:10 PM
Cobalt	0.029	0.0060		mg/L	1	8/10/2012 12:09:10 PM
Iron	0.14	0.020		mg/L	1	8/10/2012 12:09:10 PM
Manganese	0.54	0.0020	*	mg/L	1	8/10/2012 12:09:10 PM
Nickel	0.18	0.010	*	mg/L	1	8/10/2012 12:09:10 PM
Silver	ND	0.0050		mg/L	1	8/10/2012 12:09:10 PM
Vanadium	ND	0.050		mg/L	1	8/10/2012 12:09:10 PM
Zinc	0.13	0.010		mg/L	1	8/10/2012 12:09:10 PM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	0.54	0.0020		mg/L	1	8/7/2012 10:07:08 AM
Beryllium	0.0021	0.0020		mg/L	1	8/7/2012 10:07:08 AM
Cadmium	ND	0.0020		mg/L	1	8/7/2012 10:07:08 AM
Chromium	0.075	0.0060		mg/L	1	8/7/2012 10:07:08 AM
Cobalt	0.038	0.0060		mg/L	1	8/7/2012 10:07:08 AM
Iron	31	1.0	*	mg/L	50	8/7/2012 4:33:49 PM
Manganese	1.3	0.020	*	mg/L	10	8/7/2012 10:12:15 AM
Nickel	0.20	0.010	*	mg/L	1	8/7/2012 10:07:08 AM
Silver	ND	0.0050		mg/L	1	8/7/2012 10:07:08 AM
Vanadium	ND	0.050		mg/L	1	8/7/2012 10:07:08 AM
Zinc	0.32	0.010		mg/L	1	8/7/2012 10:07:08 AM
EPA 200.8: DISSOLVED METALS						Analyst: **SNV**
Antimony	ND	0.0050		mg/L	5	7/26/2012 7:58:22 PM
Arsenic	0.011	0.0050	*	mg/L	5	7/26/2012 7:58:22 PM
Lead	ND	0.0050		mg/L	5	7/26/2012 7:58:22 PM
Selenium	0.023	0.0050		mg/L	5	7/26/2012 7:58:22 PM
EPA 200.8: METALS						Analyst: **SNV**
Antimony	ND	0.0025		mg/L	2.5	8/13/2012 5:44:15 PM
Arsenic	0.012	0.0025	*	mg/L	2.5	8/13/2012 5:44:15 PM
Lead	0.044	0.0025	*	mg/L	2.5	8/13/2012 5:44:15 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 GW
Project: SWMU NO.14
Collection Date: 7/19/2012 10:00:00 AM
Lab ID: 1207940-029
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 200.8: METALS						Analyst: **SNV**
Selenium	0.014	0.0025		mg/L	2.5	8/13/2012 5:44:15 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:11:41 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Aniline	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Anthracene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 1:45:30 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Carbazole	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Chrysene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Di-n-butyl phthalate	20	10		µg/L	1	7/25/2012 1:45:30 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 1:45:30 PM
2,4-Dimethylphenol	27	10		µg/L	1	7/25/2012 1:45:30 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 GW
Project: SWMU NO.14
Collection Date: 7/19/2012 10:00:00 AM
Lab ID: 1207940-029
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 1:45:30 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 1:45:30 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Fluorene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Isophorone	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 1:45:30 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 1:45:30 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 1:45:30 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Phenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Pyrene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Pyridine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Surr: 2,4,6-Tribromophenol	69.8	44.2-126		%REC	1	7/25/2012 1:45:30 PM
Surr: 2-Fluorobiphenyl	66.1	37-114		%REC	1	7/25/2012 1:45:30 PM
Surr: 2-Fluorophenol	45.9	23.4-98		%REC	1	7/25/2012 1:45:30 PM
Surr: 4-Terphenyl-d14	77.8	41.3-116		%REC	1	7/25/2012 1:45:30 PM
Surr: Nitrobenzene-d5	59.6	39.5-118		%REC	1	7/25/2012 1:45:30 PM
Surr: Phenol-d5	42.2	20.9-95.9		%REC	1	7/25/2012 1:45:30 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 GW
Project: SWMU NO.14
Collection Date: 7/19/2012 10:00:00 AM
Lab ID: 1207940-029
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	67	10		µg/L	10	7/27/2012 4:33:05 PM
Toluene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Ethylbenzene	49	10		µg/L	10	7/27/2012 4:33:05 PM
Methyl tert-butyl ether (MTBE)	310	10		µg/L	10	7/27/2012 4:33:05 PM
1,2,4-Trimethylbenzene	85	10		µg/L	10	7/27/2012 4:33:05 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Naphthalene	42	20		µg/L	10	7/27/2012 4:33:05 PM
1-Methylnaphthalene	61	40		µg/L	10	7/27/2012 4:33:05 PM
2-Methylnaphthalene	ND	40		µg/L	10	7/27/2012 4:33:05 PM
Acetone	420	100		µg/L	10	7/27/2012 4:33:05 PM
Bromobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Bromodichloromethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Bromoform	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Bromomethane	ND	30		µg/L	10	7/27/2012 4:33:05 PM
2-Butanone	ND	100		µg/L	10	7/27/2012 4:33:05 PM
Carbon disulfide	ND	100		µg/L	10	7/27/2012 4:33:05 PM
Carbon Tetrachloride	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Chlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Chloroethane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
Chloroform	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Chloromethane	ND	30		µg/L	10	7/27/2012 4:33:05 PM
2-Chlorotoluene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
4-Chlorotoluene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
cis-1,2-DCE	ND	10		µg/L	10	7/27/2012 4:33:05 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
Dibromochloromethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Dibromomethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Dichlorodifluoromethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1-Dichloroethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1-Dichloroethene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dichloropropane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,3-Dichloropropane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
2,2-Dichloropropane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
1,1-Dichloropropene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Hexachlorobutadiene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
2-Hexanone	ND	100		µg/L	10	7/27/2012 4:33:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-2 GW
Project: SWMU NO.14
Collection Date: 7/19/2012 10:00:00 AM
Lab ID: 1207940-029
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Isopropylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
4-Isopropyltoluene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	7/27/2012 4:33:05 PM
Methylene Chloride	ND	30		µg/L	10	7/27/2012 4:33:05 PM
n-Butylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
n-Propylbenzene	10	10		µg/L	10	7/27/2012 4:33:05 PM
sec-Butylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Styrene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
tert-Butylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	7/27/2012 4:33:05 PM
trans-1,2-DCE	ND	10		µg/L	10	7/27/2012 4:33:05 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1,2-Trichloroethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Trichloroethene (TCE)	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Trichlorofluoromethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
Vinyl chloride	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Xylenes, Total	45	15		µg/L	10	7/27/2012 4:33:05 PM
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	10	7/27/2012 4:33:05 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	10	7/27/2012 4:33:05 PM
Surr: Dibromofluoromethane	101	70-130		%REC	10	7/27/2012 4:33:05 PM
Surr: Toluene-d8	104	70-130		%REC	10	7/27/2012 4:33:05 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:00:00 PM
Lab ID: 1207940-030
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 8:16:25 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 8:16:25 PM
Surr: DNOP	130	79.5-166		%REC	1	7/23/2012 8:16:25 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/25/2012 2:08:44 AM
Surr: BFB	97.6	69.8-119		%REC	1	7/25/2012 2:08:44 AM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	ND	0.0020		mg/L	1	8/7/2012 9:45:25 AM
Beryllium	ND	0.0020		mg/L	1	8/7/2012 9:45:25 AM
Cadmium	ND	0.0020		mg/L	1	8/7/2012 9:45:25 AM
Chromium	ND	0.0060		mg/L	1	8/7/2012 9:45:25 AM
Cobalt	ND	0.0060		mg/L	1	8/7/2012 9:45:25 AM
Iron	ND	0.020		mg/L	1	8/7/2012 9:45:25 AM
Manganese	ND	0.0020		mg/L	1	8/7/2012 9:45:25 AM
Nickel	ND	0.010		mg/L	1	8/7/2012 9:45:25 AM
Silver	ND	0.0050		mg/L	1	8/7/2012 9:45:25 AM
Vanadium	ND	0.050		mg/L	1	8/7/2012 9:45:25 AM
Zinc	ND	0.010		mg/L	1	8/7/2012 9:45:25 AM
EPA 200.8: METALS						Analyst: **SNV**
Antimony	ND	0.0010		mg/L	1	7/26/2012 8:06:14 PM
Arsenic	ND	0.0010		mg/L	1	7/26/2012 8:06:14 PM
Lead	ND	0.0010		mg/L	1	7/26/2012 8:06:14 PM
Selenium	ND	0.0010		mg/L	1	7/26/2012 8:06:14 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:13:29 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Aniline	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Anthracene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 2:15:34 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 2:15:34 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:00:00 PM
Lab ID: 1207940-030
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Carbazole	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Chrysene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 2:15:34 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 2:15:34 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 2:15:34 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Fluorene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Isophorone	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 2:15:34 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 2:15:34 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:00:00 PM
Lab ID: 1207940-030
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 2:15:34 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 2:15:34 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 2:15:34 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Phenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Pyrene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Pyridine	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Surr: 2,4,6-Tribromophenol	98.6	44.2-126		%REC	1	7/25/2012 2:15:34 PM
Surr: 2-Fluorobiphenyl	78.3	37-114		%REC	1	7/25/2012 2:15:34 PM
Surr: 2-Fluorophenol	61.4	23.4-98		%REC	1	7/25/2012 2:15:34 PM
Surr: 4-Terphenyl-d14	93.0	41.3-116		%REC	1	7/25/2012 2:15:34 PM
Surr: Nitrobenzene-d5	74.3	39.5-118		%REC	1	7/25/2012 2:15:34 PM
Surr: Phenol-d5	45.8	20.9-95.9		%REC	1	7/25/2012 2:15:34 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Toluene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Ethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Naphthalene	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 2:19:04 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 2:19:04 AM
Acetone	ND	10		µg/L	1	7/25/2012 2:19:04 AM
Bromobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Bromoform	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Bromomethane	ND	3.0		µg/L	1	7/25/2012 2:19:04 AM
2-Butanone	ND	10		µg/L	1	7/25/2012 2:19:04 AM
Carbon disulfide	ND	10		µg/L	1	7/25/2012 2:19:04 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:00:00 PM
Lab ID: 1207940-030
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Carbon Tetrachloride	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Chlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Chloroethane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
Chloroform	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Chloromethane	ND	3.0		µg/L	1	7/25/2012 2:19:04 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Dibromomethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
2-Hexanone	ND	10		µg/L	1	7/25/2012 2:19:04 AM
Isopropylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/25/2012 2:19:04 AM
Methylene Chloride	ND	3.0		µg/L	1	7/25/2012 2:19:04 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Styrene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: FB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:00:00 PM
Lab ID: 1207940-030
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
Vinyl chloride	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Xylenes, Total	ND	1.5		µg/L	1	7/25/2012 2:19:04 AM
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%REC	1	7/25/2012 2:19:04 AM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	7/25/2012 2:19:04 AM
Surr: Dibromofluoromethane	100	70-130		%REC	1	7/25/2012 2:19:04 AM
Surr: Toluene-d8	105	70-130		%REC	1	7/25/2012 2:19:04 AM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:15:00 PM
Lab ID: 1207940-031
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 8:41:47 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 8:41:47 PM
Surr: DNOP	128	79.5-166		%REC	1	7/23/2012 8:41:47 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/25/2012 2:38:55 AM
Surr: BFB	88.8	69.8-119		%REC	1	7/25/2012 2:38:55 AM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	0.0062	0.0020		mg/L	1	8/7/2012 9:52:35 AM
Beryllium	ND	0.0020		mg/L	1	8/7/2012 9:52:35 AM
Cadmium	ND	0.0020		mg/L	1	8/7/2012 9:52:35 AM
Chromium	ND	0.0060		mg/L	1	8/7/2012 9:52:35 AM
Cobalt	ND	0.0060		mg/L	1	8/7/2012 9:52:35 AM
Iron	0.14	0.020		mg/L	1	8/7/2012 9:52:35 AM
Manganese	ND	0.0020		mg/L	1	8/7/2012 9:52:35 AM
Nickel	ND	0.010		mg/L	1	8/7/2012 9:52:35 AM
Silver	ND	0.0050		mg/L	1	8/7/2012 9:52:35 AM
Vanadium	ND	0.050		mg/L	1	8/7/2012 9:52:35 AM
Zinc	ND	0.010		mg/L	1	8/7/2012 9:52:35 AM
EPA 200.8: METALS						Analyst: **SNV**
Antimony	ND	0.0010		mg/L	1	7/26/2012 8:10:10 PM
Arsenic	ND	0.0010		mg/L	1	7/26/2012 8:10:10 PM
Lead	ND	0.0010		mg/L	1	7/26/2012 8:10:10 PM
Selenium	ND	0.0010		mg/L	1	7/26/2012 8:10:10 PM
EPA METHOD 245.1: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:15:18 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Aniline	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Anthracene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 2:45:43 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 2:45:43 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:15:00 PM
Lab ID: 1207940-031
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Carbazole	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Chrysene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 2:45:43 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 2:45:43 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 2:45:43 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Fluorene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Isophorone	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 2:45:43 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 2:45:43 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:15:00 PM
Lab ID: 1207940-031
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 2:45:43 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 2:45:43 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 2:45:43 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Phenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Pyrene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Pyridine	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Surr: 2,4,6-Tribromophenol	61.9	44.2-126		%REC	1	7/25/2012 2:45:43 PM
Surr: 2-Fluorobiphenyl	84.9	37-114		%REC	1	7/25/2012 2:45:43 PM
Surr: 2-Fluorophenol	44.2	23.4-98		%REC	1	7/25/2012 2:45:43 PM
Surr: 4-Terphenyl-d14	81.7	41.3-116		%REC	1	7/25/2012 2:45:43 PM
Surr: Nitrobenzene-d5	85.3	39.5-118		%REC	1	7/25/2012 2:45:43 PM
Surr: Phenol-d5	44.5	20.9-95.9		%REC	1	7/25/2012 2:45:43 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Toluene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Ethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Naphthalene	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 2:47:19 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 2:47:19 AM
Acetone	ND	10		µg/L	1	7/25/2012 2:47:19 AM
Bromobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Bromoform	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Bromomethane	ND	3.0		µg/L	1	7/25/2012 2:47:19 AM
2-Butanone	ND	10		µg/L	1	7/25/2012 2:47:19 AM
Carbon disulfide	ND	10		µg/L	1	7/25/2012 2:47:19 AM

Qualifiers:

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Carbon Tetrachloride	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Chlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Chloroethane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
Chloroform	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Chloromethane	ND	3.0		µg/L	1	7/25/2012 2:47:19 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Dibromomethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
2-Hexanone	ND	10		µg/L	1	7/25/2012 2:47:19 AM
Isopropylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/25/2012 2:47:19 AM
Methylene Chloride	ND	3.0		µg/L	1	7/25/2012 2:47:19 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Styrene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB071912
Project: SWMU NO.14
Collection Date: 7/19/2012 6:15:00 PM
Lab ID: 1207940-031
Matrix: AQUEOUS
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
Vinyl chloride	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Xylenes, Total	ND	1.5		µg/L	1	7/25/2012 2:47:19 AM
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%REC	1	7/25/2012 2:47:19 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	7/25/2012 2:47:19 AM
Surr: Dibromofluoromethane	102	70-130		%REC	1	7/25/2012 2:47:19 AM
Surr: Toluene-d8	106	70-130		%REC	1	7/25/2012 2:47:19 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207940-032
Matrix: TRIP BLANK
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Toluene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Ethylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Naphthalene	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 3:15:33 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 3:15:33 AM
Acetone	ND	10		µg/L	1	7/25/2012 3:15:33 AM
Bromobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Bromoform	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Bromomethane	ND	3.0		µg/L	1	7/25/2012 3:15:33 AM
2-Butanone	ND	10		µg/L	1	7/25/2012 3:15:33 AM
Carbon disulfide	ND	10		µg/L	1	7/25/2012 3:15:33 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Chlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Chloroethane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
Chloroform	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Chloromethane	ND	3.0		µg/L	1	7/25/2012 3:15:33 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Dibromomethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
2-Hexanone	ND	10		µg/L	1	7/25/2012 3:15:33 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207940-032
Matrix: TRIP BLANK
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Isopropylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/25/2012 3:15:33 AM
Methylene Chloride	ND	3.0		µg/L	1	7/25/2012 3:15:33 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Styrene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
Vinyl chloride	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Xylenes, Total	ND	1.5		µg/L	1	7/25/2012 3:15:33 AM
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%REC	1	7/25/2012 3:15:33 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	7/25/2012 3:15:33 AM
Surr: Dibromofluoromethane	105	70-130		%REC	1	7/25/2012 3:15:33 AM
Surr: Toluene-d8	104	70-130		%REC	1	7/25/2012 3:15:33 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MEOH BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207940-033
Matrix: MEOH BLAN
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 7:35:12 PM
Surr: BFB	99.3	84-116		%REC	1	7/30/2012 7:35:12 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Toluene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Naphthalene	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 4:43:17 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 4:43:17 PM
Acetone	ND	0.75		mg/Kg	1	7/30/2012 4:43:17 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Bromoform	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Bromomethane	ND	0.15		mg/Kg	1	7/30/2012 4:43:17 PM
2-Butanone	ND	0.50		mg/Kg	1	7/30/2012 4:43:17 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/30/2012 4:43:17 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Chloroethane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Chloroform	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Chloromethane	ND	0.15		mg/Kg	1	7/30/2012 4:43:17 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MEOH BLANK
Project: SWMU NO.14
Collection Date:
Lab ID: 1207940-033
Matrix: MEOH BLAN
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/30/2012 4:43:17 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/30/2012 4:43:17 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/30/2012 4:43:17 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Styrene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Vinyl chloride	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	1	7/30/2012 4:43:17 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	7/30/2012 4:43:17 PM
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	7/30/2012 4:43:17 PM
Surr: Toluene-d8	104	70-130		%REC	1	7/30/2012 4:43:17 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank
Project: SWMU NO.14
Collection Date:
Lab ID: 1207940-034
Matrix: MEOH BLAN
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2012 2:26:44 AM
Surr: BFB	98.7	84-116		%REC	1	8/2/2012 2:26:44 AM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Toluene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Naphthalene	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 4:14:49 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 4:14:49 PM
Acetone	ND	0.75		mg/Kg	1	7/30/2012 4:14:49 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Bromoform	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Bromomethane	ND	0.15		mg/Kg	1	7/30/2012 4:14:49 PM
2-Butanone	ND	0.50		mg/Kg	1	7/30/2012 4:14:49 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/30/2012 4:14:49 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Chloroethane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Chloroform	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Chloromethane	ND	0.15		mg/Kg	1	7/30/2012 4:14:49 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MeOH Blank
Project: SWMU NO.14
Collection Date:
Lab ID: 1207940-034
Matrix: MEOH BLAN
Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/30/2012 4:14:49 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/30/2012 4:14:49 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/30/2012 4:14:49 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Styrene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Vinyl chloride	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	7/30/2012 4:14:49 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	7/30/2012 4:14:49 PM
Surr: Dibromofluoromethane	92.1	70-130		%REC	1	7/30/2012 4:14:49 PM
Surr: Toluene-d8	97.2	70-130		%REC	1	7/30/2012 4:14:49 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number 120725001-001 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-001D / SWMU 14-10 (0-0.5) **Sampling Time** 11:00 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number 120725001-002 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-002D / SWMU 14-10 (1.5-2.0) **Sampling Time** 11:05 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number 120725001-003 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-003D / SWMU 14-8 (0-0.5) **Sampling Time** 11:27 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number 120725001-004 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-004D / SWMU 14-8 (1.5-2.0) **Sampling Time** 11:40 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number 120725001-005 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-005D / SWMU 14-8 (1.5-2.0) DUP **Sampling Time** 11:40 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number 120725001-006 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-006D / SWMU 14-12 (0-0.5) **Sampling Time** 12:05 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number 120725001-007 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-007D / SWMU 14-12 (1.5-2.0) **Sampling Time** 12:12 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number 120725001-008 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-008D / SWMU 14-13 (0-0.5) **Sampling Time** 12:36 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number 120725001-009 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-009D / SWMU 14-13 (1.5-2.0) **Sampling Time** 12:45 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number 120725001-010 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-010D / SWMU 14-14 (0-0.5) **Sampling Time** 1:07 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number 120725001-011 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-011D / SWMU 14-14 (1.5-2.0) **Sampling Time** 1:12 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number 120725001-012 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-012D / SWMU 14-11 (0-0.5) **Sampling Time** 1:33 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

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ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number 120725001-013 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-013D / SWMU 14-11 (1.5-2.0) **Sampling Time** 1:38 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number 120725001-014 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-014D / SWMU 14-18 (0-0.5) **Sampling Time** 2:08 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.22	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number 120725001-015 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-015D / SWMU 14-18 (1.5-2.0) **Sampling Time** 2:15 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.50	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number	120725001-016	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-016D / SWMU 14-5 (0-0.5)			**Sampling Time**	3:00 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.600	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-017	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-017D / SWMU 14-5 (0-0.5) DUP			**Sampling Time**	3:00 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-018	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-018D / SWMU 14-5 (1.5-2.0)			**Sampling Time**	3:06 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number 120725001-019 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-019D / SWMU 14-19 (0-0.5) **Sampling Time** 3:26 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number 120725001-020 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-020D / SWMU 14-19 (1.5-2.0) **Sampling Time** 3:33 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number 120725001-021 **Sampling Date** 7/19/2012 **Date/Time Received** 7/24/2012 12:50 PM
Client Sample ID 1207940-021D / SWMU 14-17 (0-0.5) **Sampling Time** 4:11 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.33	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	120725001
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1207940
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	120725001-022	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-022D / SWMU 14-17 (1.5-2.0)			**Sampling Time**	4:18 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-023	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-023D / SWMU 14-16 (0-0.5)			**Sampling Time**	4:45 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-024	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-024D / SWMU 14-16 (1.5-2.0)			**Sampling Time**	4:51 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	120725001
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1207940
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	120725001-025	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-025D / SWMU 14-15 (0-0.5)			**Sampling Time**	5:14 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-026	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-026D / SWMU 14-15 (1.5-2.0)			**Sampling Time**	5:19 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-027	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-027D / SWMU 14-20 (0-0.5)			**Sampling Time**	5:50 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Anatek Labs, Inc.

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	120725001
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1207940
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	120725001-028	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-028D / SWMU 14-20 (0-0.5) DUP			**Sampling Time**	5:50 PM
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-029	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-029F / SWMU 14-2 GW			**Sampling Time**	10:00 AM
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.216	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-030	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-030F / FB071912			**Sampling Time**	6:00 PM
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	8/1/2012	JTT	EPA 335.4	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	120725001
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1207940
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	120725001-031	**Sampling Date**	7/19/2012	**Date/Time Received**	7/24/2012 12:50 PM
Client Sample ID	1207940-031F / EB071912			**Sampling Time**	6:15 PM
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2992** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **2992** RunNo: **4442**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124085** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Manganese	ND	0.0020								
Zinc	ND	0.010								

Sample ID **LCS-2992** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **2992** RunNo: **4442**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124086** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.6	85	115			
Cadmium	0.50	0.0020	0.5000	0	101	85	115			
Chromium	0.49	0.0060	0.5000	0	97.3	85	115			
Manganese	0.49	0.0020	0.5000	0	97.3	85	115			
Zinc	0.48	0.010	0.5000	0	95.8	85	115			

Sample ID **MB-2992** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **2992** RunNo: **4694**
Prep Date: **7/24/2012** Analysis Date: **8/7/2012** SeqNo: **131946** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS-2992** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **2992** RunNo: **4694**
Prep Date: **7/24/2012** Analysis Date: **8/7/2012** SeqNo: **131947** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.0	85	115			
Beryllium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.9	85	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS-2992** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **2992** RunNo: **4694**
Prep Date: **7/24/2012** Analysis Date: **8/7/2012** SeqNo: **131947** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.4	85	115			
Iron	0.49	0.020	0.5000	0	98.4	85	115			
Manganese	0.49	0.0020	0.5000	0	97.1	85	115			
Nickel	0.47	0.010	0.5000	0	93.7	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			
Zinc	0.47	0.010	0.5000	0	93.9	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4694** RunNo: **4694**
Prep Date: Analysis Date: **8/7/2012** SeqNo: **131952** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R4694** RunNo: **4694**
Prep Date: Analysis Date: **8/7/2012** SeqNo: **131953** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.9	85	115			
Beryllium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.50	0.0020	0.5000	0.0005300	99.7	85	115			
Chromium	0.49	0.0060	0.5000	0	98.4	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.2	85	115			
Iron	0.49	0.020	0.5000	0	97.3	85	115			
Manganese	0.49	0.0020	0.5000	0	97.1	85	115			
Nickel	0.46	0.010	0.5000	0.001850	92.5	85	115			
Silver	0.10	0.0050	0.1000	0	100	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			
Zinc	0.47	0.010	0.5000	0	93.2	85	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207605-004AMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4694** RunNo: **4694**
Prep Date: Analysis Date: **8/7/2012** SeqNo: **131960** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.63	0.0020	0.5000	0.09631	106	70	130			
Beryllium	0.55	0.0020	0.5000	0	110	70	130			
Cadmium	0.55	0.0020	0.5000	0	110	70	130			
Chromium	0.53	0.0060	0.5000	0	105	70	130			
Nickel	0.49	0.010	0.5000	0	97.7	70	130			
Zinc	0.51	0.010	0.5000	0.006940	100	70	130			

Sample ID **1207605-004AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R4694** RunNo: **4694**
Prep Date: Analysis Date: **8/7/2012** SeqNo: **131961** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.61	0.0020	0.5000	0.09631	103	70	130	2.89	20	
Beryllium	0.53	0.0020	0.5000	0	105	70	130	4.73	20	
Cadmium	0.53	0.0020	0.5000	0	106	70	130	4.00	20	
Chromium	0.51	0.0060	0.5000	0	102	70	130	2.90	20	
Nickel	0.48	0.010	0.5000	0	95.1	70	130	2.65	20	
Zinc	0.50	0.010	0.5000	0.006940	97.9	70	130	2.60	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R4878** RunNo: **4878**
Prep Date: Analysis Date: **8/15/2012** SeqNo: **137839** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R4878** RunNo: **4878**
Prep Date: Analysis Date: **8/15/2012** SeqNo: **137840** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R4793** RunNo: **4793**
Prep Date: Analysis Date: **8/10/2012** SeqNo: **135124** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R4793** RunNo: **4793**
Prep Date: Analysis Date: **8/10/2012** SeqNo: **135125** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.52	0.0020	0.5000	0	103	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.5	85	115			
Chromium	0.50	0.0060	0.5000	0.001100	99.1	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.5	85	115			
Iron	0.49	0.020	0.5000	0.006750	97.3	85	115			
Manganese	0.49	0.0020	0.5000	0	97.8	85	115			
Nickel	0.47	0.010	0.5000	0	94.1	85	115			
Silver	0.10	0.0050	0.1000	0	99.8	85	115			
Vanadium	0.52	0.050	0.5000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0.002400	97.3	85	115			

Sample ID **1206C11-001IMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **R4793** RunNo: **4793**
Prep Date: Analysis Date: **8/10/2012** SeqNo: **135154** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.003510	99.1	70	130			

Sample ID **1206C11-001IMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **R4793** RunNo: **4793**
Prep Date: Analysis Date: **8/10/2012** SeqNo: **135155** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0.003510	97.9	70	130	1.15	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R4878** RunNo: **4878**
Prep Date: Analysis Date: **8/15/2012** SeqNo: **137837** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R4878** RunNo: **4878**
Prep Date: Analysis Date: **8/15/2012** SeqNo: **137838** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.9	85	115			

Sample ID **1207385-012AMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **R4878** RunNo: **4878**
Prep Date: Analysis Date: **8/15/2012** SeqNo: **137908** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.54	0.0020	0.5000	0.02608	103	70	130			

Sample ID **1207385-012AMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **R4878** RunNo: **4878**
Prep Date: Analysis Date: **8/15/2012** SeqNo: **137909** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.54	0.0020	0.5000	0.02608	102	70	130	0.846	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124866** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.9	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	98.1	85	115			
Selenium	0.028	0.0010	0.02500	0	110	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124867** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1207221-005AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124875** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.025	0.0010	0.02500	0.0004564	98.5	70	130			

Sample ID **1207238-010AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124890** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.025	0.0010	0.02500	0.0005791	96.5	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124891** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.024	0.0010	0.02500	0	95.5	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124892** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**MB-2992**	SampType:	**MBLK**	TestCode:	**EPA 200.8: Metals**
Client ID:	**PBW**	Batch ID:	**2992**	RunNo:	**4529**
Prep Date:	**7/24/2012**	Analysis Date:	**7/30/2012**	SeqNo:	**127013** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								

Sample ID	**MB-2992**	SampType:	**MBLK**	TestCode:	**EPA 200.8: Metals**
Client ID:	**PBW**	Batch ID:	**2992**	RunNo:	**4564**
Prep Date:	**7/24/2012**	Analysis Date:	**7/31/2012**	SeqNo:	**128124** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0025								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207285-002AMS** SampType: **MS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124796** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0.0004413	99.7	70	130			
Selenium	0.034	0.0010	0.02500	0.008055	106	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124807** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	85	115			
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.028	0.0010	0.02500	0	111	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124809** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1207385-012AMS** SampType: **MS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124832** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0.0005215	101	70	130			
Lead	0.024	0.0010	0.02500	0	97.4	70	130			
Selenium	0.026	0.0010	0.02500	0	103	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R4467** RunNo: **4467**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **124858** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.9	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	98.1	85	115			
Selenium	0.028	0.0010	0.02500	0	110	85	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**							
Client ID: **LCSW**	Batch ID: **R4467**	RunNo: **4467**							
Prep Date:	Analysis Date: **7/26/2012**	SeqNo: **124859**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.024	0.0010	0.02500	0	95.5	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**							
Client ID: **PBW**	Batch ID: **R4467**	RunNo: **4467**							
Prep Date:	Analysis Date: **7/26/2012**	SeqNo: **124861**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**							
Client ID: **PBW**	Batch ID: **R4467**	RunNo: **4467**							
Prep Date:	Analysis Date: **7/26/2012**	SeqNo: **124862**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2979** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **2979** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122185** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-2979** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **2979** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122186** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.7	80	120			

Sample ID **1207546-001BMS** SampType: **MS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **2979** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122188** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	84.4	75	125			

Sample ID **1207546-001BMSD** SampType: **MSD** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **2979** RunNo: **4384**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **122191** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0	79.7	75	125	5.66	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2946** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120621** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	77.6	140			

Sample ID **MB-2947** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **2947** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120622** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		111	77.6	140			

Sample ID **LCS-2946** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120623** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	76.3	52.6	130			
Surr: DNOP	4.5		5.000		90.5	77.6	140			

Sample ID **LCS-2947** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **2947** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120624** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.6	52.6	130			
Surr: DNOP	4.4		5.000		87.1	77.6	140			

Sample ID **1207838-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120626** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.7	48.73	0	78.1	57.2	146			
Surr: DNOP	4.4		4.873		89.6	77.6	140			

Sample ID **1207838-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120627** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207838-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **2946** RunNo: **4221**
Prep Date: **7/21/2012** Analysis Date: **7/22/2012** SeqNo: **120627** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.9	49.55	0	71.7	57.2	146	6.92	24.5	
Surr: DNOP	4.4		4.955		88.1	77.6	140	0	0	

Sample ID **MB-2983** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **2983** RunNo: **4371**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **121772** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		105	77.6	140			

Sample ID **LCS-2983** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **2983** RunNo: **4371**
Prep Date: **7/23/2012** Analysis Date: **7/24/2012** SeqNo: **121845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.5	52.6	130			
Surr: DNOP	4.0		5.000		79.7	77.6	140			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-2965** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **PBW** Batch ID: **2965** RunNo: **4229**
Prep Date: **7/23/2012** Analysis Date: **7/23/2012** SeqNo: **121391** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		123	79.5	166			

Sample ID **LCS-2965** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSW** Batch ID: **2965** RunNo: **4229**
Prep Date: **7/23/2012** Analysis Date: **7/23/2012** SeqNo: **121392** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.0	74	157			
Surr: DNOP	0.51		0.5000		102	79.5	166			

Sample ID **LCSD-2965** SampType: **LCSD** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSS02** Batch ID: **2965** RunNo: **4229**
Prep Date: **7/23/2012** Analysis Date: **7/23/2012** SeqNo: **121393** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.9	74	157	0.931	23	
Surr: DNOP	0.53		0.5000		106	79.5	166	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3010** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3010** RunNo: **4444**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124694** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		99.6	84	116			

Sample ID **LCS-3010** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3010** RunNo: **4444**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124695** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	85	115			
Surr: BFB	1100		1000		108	84	116			

Sample ID **1207A15-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3010** RunNo: **4444**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124697** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.61	3.490	84.9	70	130			
Surr: BFB	1100		944.3		112	84	116			

Sample ID **1207A15-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3010** RunNo: **4444**
Prep Date: **7/24/2012** Analysis Date: **7/26/2012** SeqNo: **124698** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.58	3.490	83.3	70	130	1.63	22.1	
Surr: BFB	1100		943.4		113	84	116	0	0	

Sample ID **MB-3054** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3054** RunNo: **4572**
Prep Date: **7/26/2012** Analysis Date: **7/30/2012** SeqNo: **128276** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		98.8	84	116			

Sample ID **LCS-3054** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3054** RunNo: **4572**
Prep Date: **7/26/2012** Analysis Date: **7/30/2012** SeqNo: **128277** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.5	85	115			
Surr: BFB	1000		1000		102	84	116			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207B18-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3054** RunNo: **4572**
Prep Date: **7/26/2012** Analysis Date: **7/30/2012** SeqNo: **128295** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	41	4.9	24.58	20.18	85.5	70	130			
Surr: BFB	1100		983.3		110	84	116			

Sample ID **1207B18-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3054** RunNo: **4572**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **128296** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	43	4.9	24.44	20.18	91.6	70	130	3.25	22.1	
Surr: BFB	1100		977.5		111	84	116	0	0	

Sample ID **MB-3071** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3071** RunNo: **4513**
Prep Date: **7/27/2012** Analysis Date: **7/30/2012** SeqNo: **128374** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1200		1000		121	84	116			S

Sample ID **LCS-3071** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3071** RunNo: **4513**
Prep Date: **7/27/2012** Analysis Date: **7/30/2012** SeqNo: **128375** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.0	85	115			
Surr: BFB	1000		1000		102	84	116			

Sample ID **1207C50-001A MS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3071** RunNo: **4513**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **128377** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	2.487	91.3	70	130			
Surr: BFB	900		1000		90.5	84	116			

Sample ID **1207C50-001A MSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3071** RunNo: **4513**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **128378** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	2.487	92.2	70	130	0.826	22.1	
Surr: BFB	1100		1000		114	84	116	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207B91-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3071** RunNo: **4576**
Prep Date: **7/27/2012** Analysis Date: **8/1/2012** SeqNo: **128410** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	12	24.20	0	74.6	70	130			
Surr: BFB	5500		4840		115	84	116			

Sample ID **1207B91-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3071** RunNo: **4576**
Prep Date: **7/27/2012** Analysis Date: **8/1/2012** SeqNo: **128411** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	11	22.83	0	78.8	70	130	0.351	22.1	
Surr: BFB	4700		4566		103	84	116	0	0	

Sample ID **MB-3118** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3118** RunNo: **4574**
Prep Date: **7/31/2012** Analysis Date: **8/1/2012** SeqNo: **129323** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.4	84	116			

Sample ID **LCS-3118** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3118** RunNo: **4574**
Prep Date: **7/31/2012** Analysis Date: **8/1/2012** SeqNo: **129324** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.6	85	115			
Surr: BFB	1000		1000		101	84	116			

Sample ID **1207D19-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3118** RunNo: **4574**
Prep Date: **7/31/2012** Analysis Date: **8/1/2012** SeqNo: **129332** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	37	4.7	23.74	14.95	93.6	70	130			
Surr: BFB	1500		949.7		160	84	116			S

Sample ID **1207D19-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3118** RunNo: **4574**
Prep Date: **7/31/2012** Analysis Date: **8/1/2012** SeqNo: **129333** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	37	4.8	24.15	14.95	91.3	70	130	0.497	22.1	
Surr: BFB	1600		966.2		167	84	116	0	0	S

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122827** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.5	69.8	119			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122828** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	75.9	119			
Surr: BFB	21		20.00		103	69.8	119			

Sample ID **1207819-004AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122835** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.7	0.25	2.500	2.307	94.7	75.4	121			
Surr: BFB	100		100.0		103	69.8	119			

Sample ID **1207819-004AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R4409** RunNo: **4409**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122836** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.1	0.25	2.500	2.307	71.5	75.4	121	13.2	10.5	SR
Surr: BFB	96		100.0		96.5	69.8	119	0	0	

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R4435** RunNo: **4435**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123768** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.4	69.8	119			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R4435** RunNo: **4435**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **123769** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.0	75.9	119			
Surr: BFB	18		20.00		90.7	69.8	119			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R4233**	RunNo: **4233**	
Prep Date:	Analysis Date: **7/21/2012**	SeqNo: **121267**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b5** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	107	70.7	123			
Toluene	1.1	0.050	1.000	0	107	80	120			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	99.0	63.1	148			
Trichloroethene (TCE)	0.89	0.050	1.000	0	88.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		121	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		89.3	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID **1207900-002b ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.6439	0.006767	108	81.3	119			
Toluene	0.65	0.050	0.6439	0	100	75	121			
Chlorobenzene	0.64	0.050	0.6439	0	99.6	78.5	120			
1,1-Dichloroethene	0.68	0.050	0.6439	0	106	75.3	115			
Trichloroethene (TCE)	0.61	0.050	0.6439	0	94.7	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		97.6	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3220		97.9	70	130			
Surr: Dibromofluoromethane	0.32		0.3220		98.8	70	130			
Surr: Toluene-d8	0.32		0.3220		101	70	130			

Sample ID **1207900-002b msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/21/2012** SeqNo: **121270** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6439	0.006767	103	81.3	119	4.25	15.7	
Toluene	0.63	0.050	0.6439	0	98.3	75	121	2.14	16.2	
Chlorobenzene	0.65	0.050	0.6439	0	101	78.5	120	1.27	14.9	
1,1-Dichloroethene	0.60	0.050	0.6439	0	93.7	75.3	115	12.0	31.8	
Trichloroethene (TCE)	0.55	0.050	0.6439	0	85.7	67.8	119	10.0	16.5	
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.3220		97.7	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3220		92.3	70	130	0	0	
Surr: Toluene-d8	0.32		0.3220		100	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBS**	Batch ID: **R4379**	RunNo: **4379**			
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **122014**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	105	70.7	123			
Toluene	0.96	0.050	1.000	0	95.5	80	120			
Chlorobenzene	0.98	0.050	1.000	0	97.9	70	130			
1,1-Dichloroethene	0.93	0.050	1.000	0	92.5	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207940-007b ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 14-12 (1.5-2.** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122016** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	44	2.5	42.92	2.856	95.9	81.3	119			
Toluene	56	2.5	42.92	14.08	97.1	75	121			
Chlorobenzene	42	2.5	42.92	0	97.1	78.5	120			
1,1-Dichloroethene	39	2.5	42.92	0	91.6	75.3	115			
Trichloroethene (TCE)	37	2.5	42.92	0	85.1	67.8	119			
Surr: 1,2-Dichloroethane-d4	20		21.46		92.0	70	130			
Surr: 4-Bromofluorobenzene	20		21.46		93.8	70	130			
Surr: Dibromofluoromethane	22		21.46		101	70	130			
Surr: Toluene-d8	22		21.46		102	70	130			

Sample ID **1207940-007b msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 14-12 (1.5-2.** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122017** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	42.92	2.856	93.9	81.3	119	1.96	15.7	
Toluene	54	2.5	42.92	14.08	92.6	75	121	3.49	16.2	
Chlorobenzene	42	2.5	42.92	0	97.0	78.5	120	0.0484	14.9	
1,1-Dichloroethene	37	2.5	42.92	0	85.4	75.3	115	7.02	31.8	
Trichloroethene (TCE)	36	2.5	42.92	0	84.2	67.8	119	1.08	16.5	
Surr: 1,2-Dichloroethane-d4	20		21.46		94.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	20		21.46		92.2	70	130	0	0	
Surr: Dibromofluoromethane	23		21.46		106	70	130	0	0	
Surr: Toluene-d8	21		21.46		99.9	70	130	0	0	

Sample ID **mb-3010** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **3010** RunNo: **4468**
Prep Date: **7/24/2012** Analysis Date: **7/25/2012** SeqNo: **125366** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.0	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID **lcs-3010** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **3010** RunNo: **4468**
Prep Date: **7/24/2012** Analysis Date: **7/25/2012** SeqNo: **125367** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-3010** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **3010** RunNo: **4468**
Prep Date: **7/24/2012** Analysis Date: **7/25/2012** SeqNo: **125367** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID **mb-3010** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **3010** RunNo: **4498**
Prep Date: **7/24/2012** Analysis Date: **7/27/2012** SeqNo: **126123** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.7	70	130			
Surr: 4-Bromofluorobenzene	0.59		0.5000		118	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		99.3	70	130			

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127461** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R4537**	RunNo: **4537**	
Prep Date:	Analysis Date: **7/30/2012**	SeqNo: **127461**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127461** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.6	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		104	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		89.0	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127466** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.050	1.000	0	91.1	70.7	123			
Toluene	0.98	0.050	1.000	0	98.4	80	120			
Chlorobenzene	0.99	0.050	1.000	0	99.3	70	130			
1,1-Dichloroethene	0.83	0.050	1.000	0	83.3	63.1	148			
Trichloroethene (TCE)	0.79	0.050	1.000	0	79.3	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.3	70	130			
Surr: 4-Bromofluorobenzene	0.56		0.5000		112	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		87.9	70	130			
Surr: Toluene-d8	0.52		0.5000		105	70	130			

Sample ID **mb-3118** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **3118** RunNo: **4594**
Prep Date: **7/31/2012** Analysis Date: **8/1/2012** SeqNo: **129277** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.39		0.5000		77.6	70	130			
Surr: 4-Bromofluorobenzene	0.37		0.5000		73.3	70	130			
Surr: Dibromofluoromethane	0.37		0.5000		73.3	70	130			
Surr: Toluene-d8	0.40		0.5000		80.6	70	130			

Sample ID **lcs-3118** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **3118** RunNo: **4594**
Prep Date: **7/31/2012** Analysis Date: **8/1/2012** SeqNo: **129278** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.4	70	130			
Surr: 4-Bromofluorobenzene	0.36		0.5000		71.6	70	130			
Surr: Dibromofluoromethane	0.41		0.5000		82.0	70	130			
Surr: Toluene-d8	0.41		0.5000		81.9	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4233**	RunNo: **4233**			
Prep Date:	Analysis Date: **7/20/2012**	SeqNo: **120975**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120975** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120980** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.6	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120980** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **1207711-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120981** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	66.8	128			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **1207711-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4233** RunNo: **4233**
Prep Date: Analysis Date: **7/20/2012** SeqNo: **120982** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	66.8	128	0.0297	16.7	
Toluene	22	1.0	20.00	0	110	70	130	4.99	18.7	
Chlorobenzene	21	1.0	20.00	0	104	70	130	0.103	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	7.04	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.3	70	130	2.25	17.5	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		119	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4379**	RunNo: **4379**			
Prep Date:	Analysis Date: **7/23/2012**	SeqNo: **122005**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4379** RunNo: **4379**
Prep Date: Analysis Date: **7/23/2012** SeqNo: **122008** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	95.5	80	120			
Chlorobenzene	20	1.0	20.00	0	97.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.5	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4402**	RunNo: **4402**			
Prep Date:	Analysis Date: **7/24/2012**	SeqNo: **122636**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122636** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122639** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.2	84.1	126			
Toluene	20	1.0	20.00	0	102	80	120			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.6	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	84.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/24/2012** SeqNo: **122639** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **1207922-010a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **122640** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	66.8	128			
Toluene	21	1.0	20.00	0.7840	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	95.6	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **1207922-010a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4402** RunNo: **4402**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **122641** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	66.8	128	0.357	16.7	
Toluene	20	1.0	20.00	0.7840	97.4	70	130	4.94	18.7	
Chlorobenzene	19	1.0	20.00	0	96.4	70	130	5.90	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	90.7	70	130	5.30	16.7	
Trichloroethene (TCE)	17	1.0	20.00	0	86.6	70	130	0.772	17.5	
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		103	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125370** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4468**	RunNo: **4468**			
Prep Date:	Analysis Date: **7/25/2012**	SeqNo: **125370**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125370** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.5	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125371** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	21	1.0	20.00	0	106	80	120			
Chlorobenzene	20	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.8	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125372** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	84.1	126			
Toluene	20	1.0	20.00	0	99.6	80	120			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	88.2	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	82.9	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **1207949-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125377** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7848	97.9	66.8	128			
Toluene	21	1.0	20.00	0.7920	102	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **1207a22-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125378** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	990	50	1000	0	99.1	70	130			
1,1-Dichloroethene	910	50	1000	0	91.0	70	130			
Trichloroethene (TCE)	870	50	1000	0	86.7	70	130			
Surr: 1,2-Dichloroethane-d4	460		500.0		92.4	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.8	70	130			
Surr: Dibromofluoromethane	510		500.0		102	70	130			
Surr: Toluene-d8	500		500.0		101	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207a22-002amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125380** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	1000	50	1000	0	101	70	130	1.54	19.5	
1,1-Dichloroethene	870	50	1000	0	86.5	70	130	4.99	16.7	
Trichloroethene (TCE)	850	50	1000	0	85.2	70	130	1.72	17.5	
Surr: 1,2-Dichloroethane-d4	470		500.0		93.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	480		500.0		96.2	70	130	0	0	
Surr: Dibromofluoromethane	520		500.0		104	70	130	0	0	
Surr: Toluene-d8	520		500.0		105	70	130	0	0	

Sample ID **1207949-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/25/2012** SeqNo: **125381** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7848	97.8	66.8	128	0.104	16.7	
Toluene	20	1.0	20.00	0.7920	96.9	70	130	4.87	18.7	
Chlorobenzene	19	1.0	20.00	0	96.2	70	130	7.41	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	87.7	70	130	3.88	16.7	
Trichloroethene (TCE)	17	1.0	20.00	0	83.0	70	130	2.51	17.5	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		107	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID **b15** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4468** RunNo: **4468**
Prep Date: Analysis Date: **7/26/2012** SeqNo: **125426** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b15**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4468**	RunNo: **4468**			
Prep Date:	Analysis Date: **7/26/2012**	SeqNo: **125426**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b15**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R4468**	RunNo: **4468**
Prep Date:	Analysis Date: **7/26/2012**	SeqNo: **125426** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R4498**	RunNo: **4498**
Prep Date:	Analysis Date: **7/27/2012**	SeqNo: **126086** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4498**	RunNo: **4498**			
Prep Date:	Analysis Date: **7/27/2012**	SeqNo: **126086**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126086** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.8	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **100ng lcsb** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126090** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	84.1	126			
Toluene	22	1.0	20.00	0	108	80	120			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.7	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	87.3	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **1207a57-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126091** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	1100	50	1000	147.3	97.1	70	130			
Chlorobenzene	1000	50	1000	0	100	70	130			
1,1-Dichloroethene	870	50	1000	0	87.0	70	130			
Trichloroethene (TCE)	850	50	1000	0	85.3	70	130			
Surr: 1,2-Dichloroethane-d4	470		500.0		93.5	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.0	70	130			
Surr: Dibromofluoromethane	530		500.0		106	70	130			
Surr: Toluene-d8	520		500.0		104	70	130			

Sample ID **1207a57-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126092** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207a57-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4498** RunNo: **4498**
Prep Date: Analysis Date: **7/27/2012** SeqNo: **126092** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	1100	50	1000	147.3	95.6	70	130	1.34	18.7	
Chlorobenzene	980	50	1000	0	98.4	70	130	1.66	19.5	
1,1-Dichloroethene	800	50	1000	0	80.4	70	130	7.82	16.7	
Trichloroethene (TCE)	810	50	1000	0	80.6	70	130	5.66	17.5	
Surr: 1,2-Dichloroethane-d4	460		500.0		91.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	500		500.0		99.5	70	130	0	0	
Surr: Dibromofluoromethane	530		500.0		106	70	130	0	0	
Surr: Toluene-d8	520		500.0		104	70	130	0	0	

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127430** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R4537**	RunNo: **4537**			
Prep Date:	Analysis Date: **7/30/2012**	SeqNo: **127430**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	8.9		10.00		89.0	70	130			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127430** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127433** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.1	84.1	126			
Toluene	20	1.0	20.00	0	98.4	80	120			
Chlorobenzene	20	1.0	20.00	0	99.3	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	83.3	83	130			
Trichloroethene (TCE)	16	1.0	20.00	0	79.3	76.2	119			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.9	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **1207b41-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127434** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	56000	50	1000	57800	-161	66.8	128			SE
Toluene	62000	50	1000	60240	223	70	130			SE
Chlorobenzene	1000	50	1000	0	103	70	130			
1,1-Dichloroethene	830	50	1000	0	83.4	70	130			
Trichloroethene (TCE)	810	50	1000	0	80.8	70	130			
Surr: 1,2-Dichloroethane-d4	430		500.0		87.0	70	130			
Surr: 4-Bromofluorobenzene	500		500.0		100	70	130			
Surr: Dibromofluoromethane	440		500.0		87.4	70	130			
Surr: Toluene-d8	540		500.0		108	70	130			

Sample ID **1207b41-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127435** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	57000	50	1000	57800	-55.7	66.8	128	1.86	16.7	SE
Toluene	59000	50	1000	60240	-131	70	130	5.82	18.7	SE
Chlorobenzene	990	50	1000	0	98.7	70	130	4.19	19.5	
1,1-Dichloroethene	790	50	1000	0	78.8	70	130	5.63	16.7	
Trichloroethene (TCE)	820	50	1000	0	82.2	70	130	1.72	17.5	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207b41-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R4537** RunNo: **4537**
Prep Date: Analysis Date: **7/30/2012** SeqNo: **127435** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	450		500.0		89.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	490		500.0		98.0	70	130	0	0	
Surr: Dibromofluoromethane	450		500.0		90.7	70	130	0	0	
Surr: Toluene-d8	520		500.0		103	70	130	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-3024**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **3024**	RunNo: **4492**			
Prep Date: **7/25/2012**	Analysis Date: **7/27/2012**	SeqNo: **125905**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-3024** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125905** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		77.6	19	133			
Surr: 2-Fluorophenol	2.0		3.330		60.2	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.0	18.9	115			
Surr: Nitrobenzene-d5	1.1		1.670		67.4	20.8	123			
Surr: Phenol-d5	2.4		3.330		70.9	19.8	115			

Sample ID **lcs-3024** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125907** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-3024** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125907** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	70.7	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	61.7	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	63.5	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	78.9	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.4	39.1	86.9			
4-Nitrophenol	2.9	0.25	3.330	0	85.9	44.2	107			
Pentachlorophenol	2.5	0.40	3.330	0	74.5	36.2	80			
Phenol	2.4	0.20	3.330	0	71.3	42.7	92.7			
Pyrene	1.1	0.20	1.670	0	67.5	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		98.0	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		74.2	19	133			
Surr: 2-Fluorophenol	1.9		3.330		57.9	20.2	108			
Surr: 4-Terphenyl-d14	1.4		1.670		84.5	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		70.6	20.8	123			
Surr: Phenol-d5	2.3		3.330		68.9	19.8	115			

Sample ID **1207922-008Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125927** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.40	1.674	0	101	38.6	100			S
4-Chloro-3-methylphenol	2.8	1.0	3.339	0	84.9	35.8	108			
2-Chlorophenol	2.7	0.40	3.339	0	81.4	48.2	96.1			
1,4-Dichlorobenzene	1.2	0.40	1.674	0	73.3	42.5	97.6			
2,4-Dinitrotoluene	1.2	1.0	1.674	0	68.9	51.2	108			
N-Nitrosodi-n-propylamine	ND	0.40	1.674	0	0	31.6	114			S
4-Nitrophenol	2.1	0.50	3.339	0	63.0	22.7	144			
Pentachlorophenol	2.2	0.80	3.339	0	64.8	24	109			
Phenol	3.0	0.40	3.339	0	88.9	33.1	108			
Pyrene	1.6	0.40	1.674	0.2483	83.5	42.7	98.9			
1,2,4-Trichlorobenzene	1.2	0.40	1.674	0	69.7	27.1	118			
Surr: 2,4,6-Tribromophenol	2.2		3.339		67.3	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.674		76.2	19	133			
Surr: 2-Fluorophenol	2.4		3.339		71.5	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.674		90.0	18.9	115			
Surr: Nitrobenzene-d5	0		1.674		0	20.8	123			S
Surr: Phenol-d5	2.8		3.339		83.5	19.8	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207922-008Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **3024** RunNo: **4492**
Prep Date: **7/25/2012** Analysis Date: **7/27/2012** SeqNo: **125928** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.40	1.671	0	86.7	38.6	100	15.9	20	
4-Chloro-3-methylphenol	2.8	1.0	3.332	0	84.1	35.8	108	1.20	20	
2-Chlorophenol	2.6	0.40	3.332	0	76.5	48.2	96.1	6.31	20	
1,4-Dichlorobenzene	1.2	0.40	1.671	0	70.6	42.5	97.6	3.92	20	
2,4-Dinitrotoluene	1.3	1.0	1.671	0	75.0	51.2	108	8.24	20	
N-Nitrosodi-n-propylamine	ND	0.40	1.671	0	0	31.6	114	0	20	S
4-Nitrophenol	2.0	0.50	3.332	0	61.2	22.7	144	3.20	20	
Pentachlorophenol	2.4	0.80	3.332	0	72.1	24	109	10.3	20	
Phenol	2.7	0.40	3.332	0	80.9	33.1	108	9.61	20	
Pyrene	1.5	0.40	1.671	0.2483	75.5	42.7	98.9	8.58	20	
1,2,4-Trichlorobenzene	1.2	0.40	1.671	0	74.3	27.1	118	6.12	20	
Surr: 2,4,6-Tribromophenol	2.3		3.332		69.8	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	1.2		1.671		70.5	19	133	0	0	
Surr: 2-Fluorophenol	2.4		3.332		71.0	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.4		1.671		84.2	18.9	115	0	0	
Surr: Nitrobenzene-d5	1.2		1.671		74.7	20.8	123	0	0	
Surr: Phenol-d5	2.7		3.332		80.4	19.8	115	0	0	

Sample ID **mb-3046** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127860** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-3046**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **3046**	RunNo: **4555**			
Prep Date: **7/26/2012**	Analysis Date: **7/31/2012**	SeqNo: **127860**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-3046** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127860** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	1.6		3.330		49.3	20.1	121			
Surr: 2-Fluorobiphenyl	0.71		1.670		42.7	19	133			
Surr: 2-Fluorophenol	1.2		3.330		34.6	20.2	108			
Surr: 4-Terphenyl-d14	0.73		1.670		43.6	18.9	115			
Surr: Nitrobenzene-d5	0.67		1.670		39.9	20.8	123			
Surr: Phenol-d5	1.3		3.330		38.0	19.8	115			

Sample ID **lcs-3046** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127861** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	70.9	49.7	98.1			
4-Chloro-3-methylphenol	2.5	0.50	3.330	0	74.2	43.8	89.1			
2-Chlorophenol	2.2	0.20	3.330	0	66.0	41.1	96.9			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	60.6	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.9	44.4	104			
N-Nitrosodi-n-propylamine	1.3	0.20	1.670	0	74.9	39.1	86.9			
4-Nitrophenol	3.0	0.25	3.330	0	91.2	44.2	107			
Pentachlorophenol	2.6	0.40	3.330	0	78.4	36.2	80			
Phenol	2.3	0.20	3.330	0	70.2	42.7	92.7			
Pyrene	1.1	0.20	1.670	0	68.4	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	70.8	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.0		3.330		91.5	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		71.4	19	133			
Surr: 2-Fluorophenol	1.9		3.330		56.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		76.8	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		69.2	20.8	123			
Surr: Phenol-d5	2.4		3.330		71.7	19.8	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207940-019Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 14-19 (0-0.5')** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127874** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.99	1.660	0	85.1	38.6	100			
4-Chloro-3-methylphenol	2.6	2.5	3.310	0	78.4	35.8	108			
2-Chlorophenol	2.7	0.99	3.310	0	81.1	48.2	96.1			
1,4-Dichlorobenzene	ND	0.99	1.660	0	52.6	42.5	97.6			
2,4-Dinitrotoluene	ND	2.5	1.660	0	85.7	51.2	108			
N-Nitrosodi-n-propylamine	1.3	0.99	1.660	0	80.5	31.6	114			
4-Nitrophenol	3.1	1.2	3.310	0	93.7	22.7	144			
Pentachlorophenol	2.3	2.0	3.310	0	68.5	24	109			
Phenol	2.6	0.99	3.310	0	77.6	33.1	108			
Pyrene	1.3	0.99	1.660	0	76.4	42.7	98.9			
1,2,4-Trichlorobenzene	1.3	0.99	1.660	0	75.7	27.1	118			
Surr: 2,4,6-Tribromophenol	3.2		3.310		95.8	20.1	121			
Surr: 2-Fluorobiphenyl	1.5		1.660		92.9	19	133			
Surr: 2-Fluorophenol	2.5		3.310		76.5	20.2	108			
Surr: 4-Terphenyl-d14	1.7		1.660		102	18.9	115			
Surr: Nitrobenzene-d5	1.5		1.660		91.6	20.8	123			
Surr: Phenol-d5	2.9		3.310		87.9	19.8	115			

Sample ID **1207940-019Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 14-19 (0-0.5')** Batch ID: **3046** RunNo: **4555**
Prep Date: **7/26/2012** Analysis Date: **7/31/2012** SeqNo: **127875** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	1.0	1.667	0	88.2	38.6	100	3.97	20	
4-Chloro-3-methylphenol	2.5	2.5	3.323	0	76.3	35.8	108	2.32	20	
2-Chlorophenol	2.7	1.0	3.323	0	81.7	48.2	96.1	1.14	20	
1,4-Dichlorobenzene	ND	1.0	1.667	0	53.7	42.5	97.6	0	20	
2,4-Dinitrotoluene	ND	2.5	1.667	0	85.3	51.2	108	0	20	
N-Nitrosodi-n-propylamine	1.5	1.0	1.667	0	90.9	31.6	114	12.5	20	
4-Nitrophenol	2.8	1.2	3.323	0	83.9	22.7	144	10.6	20	
Pentachlorophenol	2.3	2.0	3.323	0	70.3	24	109	3.07	20	
Phenol	2.7	1.0	3.323	0	80.4	33.1	108	3.94	20	
Pyrene	1.4	1.0	1.667	0	83.0	42.7	98.9	8.66	20	
1,2,4-Trichlorobenzene	1.3	1.0	1.667	0	80.3	27.1	118	6.28	20	
Surr: 2,4,6-Tribromophenol	3.5		3.323		106	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	1.6		1.667		96.8	19	133	0	0	
Surr: 2-Fluorophenol	2.5		3.323		75.0	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.8		1.667		108	18.9	115	0	0	
Surr: Nitrobenzene-d5	1.5		1.667		90.8	20.8	123	0	0	
Surr: Phenol-d5	3.1		3.323		91.9	19.8	115	0	0	

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2989**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **2989**	RunNo: **4400**			
Prep Date: **7/24/2012**	Analysis Date: **7/24/2012**	SeqNo: **122513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-2989**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **2989**	RunNo: **4400**			
Prep Date: **7/24/2012**	Analysis Date: **7/24/2012**	SeqNo: **122513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	170		200.0		85.4	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		85.5	37	114			
Surr: 2-Fluorophenol	120		200.0		61.4	23.4	98			
Surr: 4-Terphenyl-d14	79		100.0		79.3	41.3	116			
Surr: Nitrobenzene-d5	84		100.0		84.2	39.5	118			
Surr: Phenol-d5	110		200.0		53.2	20.9	95.9			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-2989** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **2989** RunNo: **4400**
Prep Date: **7/24/2012** Analysis Date: **7/24/2012** SeqNo: **122514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.1	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	35.5	108			
2-Chlorophenol	130	10	200.0	0	62.6	29.8	106			
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5			
2,4-Dinitrotoluene	83	10	100.0	0	82.7	44.7	112			
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.3	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	61.2	20.2	93			
Phenol	84	10	200.0	0	42.0	23	66.1			
Pyrene	71	10	100.0	0	71.2	40.1	101			
1,2,4-Trichlorobenzene	54	10	100.0	0	53.7	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		81.9	44.2	126			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	37	114			
Surr: 2-Fluorophenol	98		200.0		49.2	23.4	98			
Surr: 4-Terphenyl-d14	71		100.0		70.6	41.3	116			
Surr: Nitrobenzene-d5	65		100.0		65.1	39.5	118			
Surr: Phenol-d5	91		200.0		45.5	20.9	95.9			

Sample ID **lcsd-2989** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **2989** RunNo: **4400**
Prep Date: **7/24/2012** Analysis Date: **7/24/2012** SeqNo: **122515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	69.9	38.2	99.4	2.61	20	
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	35.5	108	13.1	20	
2-Chlorophenol	110	10	200.0	0	55.6	29.8	106	11.9	20	
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5	0.0854	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.2	44.7	112	9.75	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.6	38.5	105	5.82	20	
4-Nitrophenol	92	10	200.0	0	46.1	11.6	73.1	2.55	20	
Pentachlorophenol	110	20	200.0	0	57.5	20.2	93	6.30	20	
Phenol	83	10	200.0	0	41.5	23	66.1	1.15	20	
Pyrene	71	10	100.0	0	71.2	40.1	101	0	20	
1,2,4-Trichlorobenzene	56	10	100.0	0	55.5	37.7	99.1	3.33	20	
Surr: 2,4,6-Tribromophenol	150		200.0		75.1	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	73		100.0		73.1	37	114	0	0	
Surr: 2-Fluorophenol	81		200.0		40.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	80		100.0		79.8	41.3	116	0	0	
Surr: Nitrobenzene-d5	70		100.0		70.1	39.5	118	0	0	
Surr: Phenol-d5	88		200.0		44.2	20.9	95.9	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3130** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **3130** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128924** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-3130** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **3130** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128925** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	97.2	80	120			

Sample ID **1207940-002CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 14-10 (1.5-2.** Batch ID: **3130** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128936** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.60	0.16	0.1647	0.2056	237	75	125			S

Sample ID **1207940-002CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 14-10 (1.5-2.** Batch ID: **3130** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128937** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.60	0.16	0.1648	0.2056	240	75	125	1.01	20	S

Sample ID **MB-3131** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128955** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-3131** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128956** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	93.3	80	120			

Sample ID **1207B18-001BMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **3131** RunNo: **4597**
Prep Date: **8/1/2012** Analysis Date: **8/2/2012** SeqNo: **128971** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.21	0.033	0.1648	0.06444	87.3	75	125			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**1207B18-001BMSD**	SampType:	**MSD**	TestCode:	**EPA Method 7471: Mercury**
Client ID:	**BatchQC**	Batch ID:	**3131**	RunNo:	**4597**
Prep Date:	**8/1/2012**	Analysis Date:	**8/2/2012**	SeqNo:	**128972** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1651	0.06444	84.5	75	125	2.10	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3008** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3008** RunNo: **4553**
Prep Date: **7/24/2012** Analysis Date: **7/31/2012** SeqNo: **127775** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-3008** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3008** RunNo: **4553**
Prep Date: **7/24/2012** Analysis Date: **7/31/2012** SeqNo: **127776** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0	99.1	80	120			
Arsenic	25	2.5	25.00	0	99.4	80	120			
Barium	23	0.10	25.00	0	91.4	80	120			
Beryllium	25	0.15	25.00	0	99.8	80	120			
Cadmium	24	0.10	25.00	0	95.2	80	120			
Chromium	23	0.30	25.00	0	91.3	80	120			
Lead	23	0.25	25.00	0	91.5	80	120			
Manganese	23	0.10	25.00	0	90.9	80	120			
Nickel	22	0.50	25.00	0	89.6	80	120			
Selenium	27	2.5	25.00	0	107	80	120			
Vanadium	24	2.5	25.00	0	94.7	80	120			
Zinc	23	2.5	25.00	0.7005	90.4	80	120			

Sample ID **MB-3008** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3008** RunNo: **4605**
Prep Date: **7/24/2012** Analysis Date: **8/1/2012** SeqNo: **129181** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.30								
Iron	1.0	1.0								
Silver	ND	0.25								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS-3008** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3008** RunNo: **4605**
Prep Date: **7/24/2012** Analysis Date: **8/1/2012** SeqNo: **129182** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	25	0.30	25.00	0	98.5	80	120			
Iron	25	1.0	25.00	1.039	96.0	80	120			B
Silver	5.1	0.25	5.000	0.05000	101	80	120			

Sample ID **1207940-020CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-19 (1.5-2.** Batch ID: **3008** RunNo: **4605**
Prep Date: **7/24/2012** Analysis Date: **8/1/2012** SeqNo: **129201** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.88	0	47.5	75	125			S
Arsenic	24	12	24.88	0	97.0	75	125			
Beryllium	26	0.75	24.88	0.8069	99.9	75	125			
Cadmium	24	0.50	24.88	0	95.6	75	125			
Chromium	38	1.5	24.88	11.91	106	75	125			
Cobalt	28	1.5	24.88	4.819	95.1	75	125			
Lead	29	1.2	24.88	4.128	99.7	75	125			
Nickel	32	2.5	24.88	8.015	95.1	75	125			
Selenium	17	12	24.88	0	67.6	75	125			S
Silver	4.6	1.2	4.976	0	93.1	75	125			
Vanadium	50	12	24.88	21.23	117	75	125			
Zinc	61	12	24.88	33.83	108	75	125			

Sample ID **1207940-020CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-19 (1.5-2.** Batch ID: **3008** RunNo: **4605**
Prep Date: **7/24/2012** Analysis Date: **8/1/2012** SeqNo: **129202** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.62	0	38.2	75	125	0	20	SR
Arsenic	21	12	24.62	0	83.9	75	125	15.5	20	
Beryllium	23	0.75	24.62	0.8069	92.2	75	125	8.77	20	
Cadmium	22	0.50	24.62	0	88.1	75	125	9.20	20	
Chromium	33	1.5	24.62	11.91	87.6	75	125	13.1	20	
Cobalt	25	1.5	24.62	4.819	83.8	75	125	11.2	20	
Lead	28	1.2	24.62	4.128	95.3	75	125	4.83	20	
Nickel	28	2.5	24.62	8.015	80.0	75	125	13.3	20	
Selenium	18	12	24.62	0	74.2	75	125	8.38	20	S
Silver	4.1	1.2	4.924	0	84.1	75	125	11.3	20	
Vanadium	46	12	24.62	21.23	102	75	125	8.17	20	
Zinc	51	12	24.62	33.83	69.2	75	125	17.5	20	S

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-3009** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3009** RunNo: **4698**
Prep Date: **7/24/2012** Analysis Date: **8/6/2012** SeqNo: **132140** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID **LCS-3009** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3009** RunNo: **4698**
Prep Date: **7/24/2012** Analysis Date: **8/6/2012** SeqNo: **132141** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.9555	99.3	80	120			

Sample ID **MB-3009** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132220** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-3009** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132221** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	28	2.5	25.00	0	114	80	120			
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	27	0.10	25.00	0	107	80	120			
Beryllium	29	0.15	25.00	0.01250	117	80	120			
Cadmium	27	0.10	25.00	0	110	80	120			
Chromium	26	0.30	25.00	0	106	80	120			
Cobalt	29	0.30	25.00	0	115	80	120			
Lead	27	0.25	25.00	0	110	80	120			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS-3009** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132221** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	26	0.10	25.00	0.07300	106	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	30	2.5	25.00	0	121	80	120			S
Silver	5.4	0.25	5.000	0	108	80	120			
Vanadium	27	2.5	25.00	0.07050	109	80	120			
Zinc	29	2.5	25.00	0	116	80	120			

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132249** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	12	23.84	0	89.4	75	125			
Beryllium	24	0.75	23.84	0.6761	97.6	75	125			
Cadmium	22	0.50	23.84	0	90.6	75	125			
Chromium	29	1.5	23.84	8.850	84.7	75	125			
Cobalt	26	1.5	23.84	4.445	90.6	75	125			
Lead	23	1.2	23.84	3.311	82.6	75	125			
Nickel	27	2.5	23.84	6.181	86.9	75	125			
Silver	4.0	1.2	4.768	0	83.8	75	125			

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4699**
Prep Date: **7/24/2012** Analysis Date: **8/5/2012** SeqNo: **132250** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	12	24.91	0	94.6	75	125	9.99	20	
Beryllium	25	0.75	24.91	0.6761	98.4	75	125	5.04	20	
Cadmium	23	0.50	24.91	0	90.6	75	125	4.33	20	
Chromium	32	1.5	24.91	8.850	94.1	75	125	10.6	20	
Cobalt	27	1.5	24.91	4.445	91.3	75	125	4.29	20	
Lead	25	1.2	24.91	3.311	87.3	75	125	8.61	20	
Nickel	29	2.5	24.91	6.181	91.7	75	125	7.56	20	
Silver	4.4	1.2	4.982	0	88.1	75	125	9.44	20	

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4734**
Prep Date: **7/24/2012** Analysis Date: **8/8/2012** SeqNo: **133485** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	13	12	23.84	0	54.1	75	125			S
Vanadium	43	12	23.84	31.42	47.7	75	125			S

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1207940**
21-Aug-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4734**
Prep Date: **7/24/2012** Analysis Date: **8/8/2012** SeqNo: **133486** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	14	12	24.91	0	57.7	75	125	10.9	20	S
Vanadium	55	12	24.91	31.42	93.0	75	125	24.2	20	R

Sample ID **1207917-005CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4816**
Prep Date: **7/24/2012** Analysis Date: **8/10/2012** SeqNo: **135933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	23.84	3.961	28.4	75	125			S
Zinc	35	13	23.84	16.80	76.6	75	125			

Sample ID **1207917-005CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **3009** RunNo: **4816**
Prep Date: **7/24/2012** Analysis Date: **8/10/2012** SeqNo: **135934** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	24.91	3.961	34.3	75	125	0	20	S
Zinc	39	13	24.91	16.80	90.3	75	125	11.4	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1207940**

Received by/date: 07/20/12

Logged By: **Ashley Gallegos** 7/20/2012 2:26:00 PM

Completed By: **Ashley Gallegos** 7/20/2012 2:44:32 PM

Reviewed By: 07/20/12

Chain of Custody

1. Were seals intact? Yes No Not Present ✔
2. Is Chain of Custody complete? Yes ✔ No Not Present
3. How was the sample delivered? Client

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ✔ No NA
5. Was an attempt made to cool the samples? Yes ✔ No NA
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ✔ No NA
7. Sample(s) in proper container(s)? Yes ✔ No
8. Sufficient sample volume for indicated test(s)? Yes ✔ No
9. Are samples (except VOA and ONG) properly preserved? Yes ✔ No
10. Was preservative added to bottles? Yes No ✔ NA
11. VOA vials have zero headspace? Yes No No VOA Vials ✔
12. Were any sample containers received broken? Yes No ✔
13. Does paperwork match bottle labels? Yes ✔ No
    (Note discrepancies on chain of custody)
    # of preserved bottles checked for pH: 4 3 (<2 or >12 unless noted)
    Adjusted?
14. Are matrices correctly identified on Chain of Custody? Yes ✔ No
15. Is it clear what analyses were requested? Yes ✔ No
16. Were all holding times able to be met? Yes ✔ No
    (If no, notify customer for authorization.)
    Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Not Present			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0227
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No.14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207140	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/19/12	1100	SOIL	SWMU 14-10 (0-0.5')	2 ENCORES	—	-001										X						
	↓	↓	↓	2 VIALS	MeOH											X						
	↓	↓	↓	2 JARS	—											X	X	X	X			
	1105	SOIL	SWMU 14-10 (1.5-2.0')	2 ENCORES	—	-002										X						
	↓	↓	↓	2 VIALS	MeOH											X						
	↓	↓	↓	2 JARS	=											X	X	X	X			
	1127	SOIL	SWMU 14-8 (0-0.5')	2 ENCORES	—	-003										X						
	↓	↓	↓	2 VIALS	MeOH											X						
	↓	↓	↓	2 JARS	—											X	X	X	X			
	1140	SOIL	SWMU 14-8 (1.5-2.0')	2 ENCORES	—	-004										X						
	↓	↓	↓	2 VIALS	MeOH											X						
	↓	↓	↓	2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/20/12	1426	[signature]	[signature]	7/20/12	1426
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207940	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/19/12	1140	SOIL	SWMU 14-8 (1.5-2.0') DUP	2 ENCORES	—	-005										X						
	↓		↓	2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1205		SWMU 14-12 (0-0.5')	2 ENCORES	~~MeOH~~	-006										X						
	↓		↓	2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1212		SWMU 14-12 (1.5-2.0')	2 ENCORES	—	-007										X						
	↓		↓	2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1236		SWMU 14-13 (0-0.5')	2 ENCORES	—	-008										X						
	↓		↓	2 VIALS	MeOH											X						
↓	↓	↓	↓	2 JARS	—											X	X	X	X			

Date	Time	Relinquished by	Received by	Date	Time
7/20/12	1426	[signature]	[signature]	7/20/12	1426
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU NO. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207140	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/19/12	1245	SOIL	SWMU 14-13 (1.5-2.0')	2 ENCORES	—	-009										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1307		SWMU 14-14 (0-0.5')	2 ENCORES	—	-010										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1312		SWMU 14-14 (1.5-2.0')	2 ENCORES	—	-011										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1333		SWMU 14-11 (0-0.5')	2 ENCORES	—	-012										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/20/12	1426	[signature]	[signature]	7/20/12	1426
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207940	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) FTRH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/19/12	1338	SOIL	SWMU 14-11 (1.5-2.0')	2 ENCORES	—	-013										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1408		SWMU 14-18 (0-0.5')	2 ENCORES	—	-014										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1415		SWMU 14-18 (1.5-2.0)	2 ENCORES	—	-015										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1500		SWMU 14-5 (0-0.5')	2 ENCORES	—	-016										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/20/12	1426	[signature]	[signature]	7/20/12	1426
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Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING, SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3, BOX 7
GALLUP NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207940	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/19/12	1500	SOIL	SWMU 14-5 (0-0.5') DUP	2 ENCORES	—	-017										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1506		SWMU 14-5 (1.5-2.0)	2 ENCORES	—	-018										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1526		SWMU 14-19 (0-0.5')	2 ENCORES	—	-019										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			
	1533		SWMU 14-19 (1.5-2.0')	2 ENCORES	—	-020										X						
				2 VIALS	MeOH											X						
				2 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/20/12	1426			7/20/12	1426
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207940	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/19/12	1611	SOIL	SWMU 14-17	2 ENCORES	—	-021										X						
	↓	↓	(0-0.5')	2 VIALS	MEOH											X						
	↓		↓	1 JAR	—											X	X	X	X			
	1618		SWMU 14-17	2 ENCORES	—	-022										X						
	↓		(1.5-2.0)	2 VIALS	MEOH											X						
	↓		↓	1 JAR	—											X	X	X	X			
	1645		SWMU 14-16	2 ENCORES	—	-023										X						
	↓		(0-0.5')	2 VIALS	MEOH											X						
	↓		↓	1 JAR	—											X	X	X	X			
	1651		SWMU 14-16	2 ENCORES	—	-024										X						
	↓		(1.5-2.0)	2 VIALS	MEOH											X						
	↓	↓	↓	1 JAR	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/20/12	1426	[signature]	[signature]	7/20/12	1426
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Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX T
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROCH-RBS
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☑ EDD (Type) EXCEL

Turn-Around Time:
☑ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RBS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.6

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4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207940	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
7/19/12	1714	SOIL	SWMU 14-15 (0-0.5)	2 ENCORES	—	-025										X						
	↓		↓	2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			
	1719		SWMU 14-15 (1.5-2.0')	2 ENCORES	—	-026										X						
				2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			
	1750		SWMU 14-20 (0-0.5')	2 ENCORES	—	-027										X						
				2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			
	1750		SWMU 14-20 (0-0.5') DUP	2 ENCORES	—	-028										X						
				2 VIALS	MeOH											X						
				1 JAR	—											X	X	X	X			

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7/20/12	1426			7/20/12	1426
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Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☐ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.0

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207940	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TPH	METALS	DISSOLVED METALS		Air Bubbles (Y or N)
7/19/12	1000	WATER	SWMU 14-2 GW	6 VOA	HCL & NEAT	-029										X		X				
				1 LAMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NAOH														X			
				1 PLASTIC	HNO_3															X		
	1800	WATER	FB071912	6 VOA	HCL & NEAT	-030										X		X				
				1 LAMBER	-												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NAOH														X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/20/12	1426	[signature]	[signature]	7/20/12	1426
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Chain-of-Custody Record

Client: WESTERN REFINING SW, INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation ☐ NELAP ☐ Other _____
☑ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207940	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TPH	METALS			Air Bubbles (Y or N)
7/9/12	1815	WATER	EB071912	6 VOA	HCL & NEAT	-031										X		X				
				1 L AMBER	—												X					
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NAOH														X			
7/19/12	—	WATER	TRIP BLANK	VOA	HCL	-032										X						
			MeOH Blank			-033																
						07/26/12																
			MeOH Blank			-034																

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/20/12	1426			7/20/12	1426
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 14, 2012

Scott Crouch
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.14 OrderNo.: 1210582

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 7 sample(s) on 10/11/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued October 30, 2012.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:35:00 PM
Lab ID: 1210582-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/12/2012 10:36:48 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/12/2012 10:36:48 AM
Surr: DNOP	104	77.6-140		%REC	1	10/12/2012 10:36:48 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 6:01:43 PM
Surr: BFB	105	84-116		%REC	1	10/12/2012 6:01:43 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:59:51 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 5:38:30 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:38:30 PM
Barium	350	1.0		mg/Kg	10	10/17/2012 2:56:55 PM
Beryllium	1.0	0.75		mg/Kg	5	10/16/2012 5:38:30 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:38:30 PM
Chromium	9.7	1.5		mg/Kg	5	10/16/2012 5:38:30 PM
Cobalt	5.0	1.5		mg/Kg	5	10/16/2012 5:38:30 PM
Iron	15000	500		mg/Kg	500	10/17/2012 2:59:21 PM
Lead	6.4	1.2		mg/Kg	5	10/16/2012 5:38:30 PM
Manganese	420	1.0		mg/Kg	10	10/17/2012 2:56:55 PM
Nickel	8.2	2.5		mg/Kg	5	10/16/2012 5:38:30 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:39:07 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:38:30 PM
Vanadium	17	12		mg/Kg	5	10/16/2012 5:38:30 PM
Zinc	17	12		mg/Kg	5	10/16/2012 5:38:30 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Aniline	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Anthracene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Azobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:35:00 PM
Lab ID: 1210582-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Carbazole	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/12/2012 6:23:08 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Chrysene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 6:23:08 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/12/2012 6:23:08 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/12/2012 6:23:08 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/12/2012 6:23:08 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/12/2012 6:23:08 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Fluorene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Isophorone	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Naphthalene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:35:00 PM
Lab ID: 1210582-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/12/2012 6:23:08 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/12/2012 6:23:08 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/12/2012 6:23:08 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Phenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Pyrene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Pyridine	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Surr: 2,4,6-Tribromophenol	51.9	21.3-145		%REC	1	10/12/2012 6:23:08 PM
Surr: 2-Fluorobiphenyl	50.9	20-131		%REC	1	10/12/2012 6:23:08 PM
Surr: 2-Fluorophenol	48.4	11.9-130		%REC	1	10/12/2012 6:23:08 PM
Surr: 4-Terphenyl-d14	48.3	25.1-149		%REC	1	10/12/2012 6:23:08 PM
Surr: Nitrobenzene-d5	48.5	25.6-137		%REC	1	10/12/2012 6:23:08 PM
Surr: Phenol-d5	51.0	20.3-132		%REC	1	10/12/2012 6:23:08 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00291	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Toluene	0.00336	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Ethylbenzene	0.00157	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Xylenes, Total	0.00786	0.00201		mg/Kg	1	10/11/2012 4:41:54 PM
Methyl tert-butyl ether (MTBE)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2,4-Trimethylbenzene	0.00104	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,3,5-Trimethylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dichloroethane (EDC)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dibromoethane (EDB)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Naphthalene	ND	0.00201		mg/Kg	1	10/11/2012 4:41:54 PM
1-Methylnaphthalene	ND	0.00402		mg/Kg	1	10/11/2012 4:41:54 PM
2-Methylnaphthalene	ND	0.00402		mg/Kg	1	10/11/2012 4:41:54 PM
Acetone	0.0973	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
Bromobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Bromodichloromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Bromoform	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Bromomethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
2-Butanone	ND	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
Carbon tetrachloride	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Chlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Chloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:35:00 PM
Lab ID: 1210582-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Chloromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
2-Chlorotoluene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Carbon disulfide	ND	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
4-Chlorotoluene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
cis-1,2-DCE	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dibromo-3-chloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Dibromochloromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Dibromomethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,3-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,4-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Dichlorodifluoromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1-Dichloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1-Dichloroethene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,3-Dichloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
2,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1-Dichloropropene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Hexachlorobutadiene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Isopropylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
4-Isopropyltoluene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Methylene chloride	ND	0.00302		mg/Kg	1	10/11/2012 4:41:54 PM
n-Butylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
2-Hexanone	ND	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
n-Propylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
sec-Butylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Styrene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
4-Methyl-2-pentanone	ND	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
tert-Butylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1,1,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Tetrachloroethene (PCE)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
trans-1,2-DCE	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2,3-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2,4-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1,1-Trichloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1,2-Trichloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Trichloroethene (TCE)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Trichlorofluoromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:35:00 PM
Lab ID: 1210582-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Vinyl chloride	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	10/11/2012 4:41:54 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	1	10/11/2012 4:41:54 PM
Surr: Dibromofluoromethane	89.5	70-130		%REC	1	10/11/2012 4:41:54 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	10/11/2012 4:41:54 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:45:00 PM
Lab ID: 1210582-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	260	9.9		mg/Kg	1	10/12/2012 12:46:40 PM
Motor Oil Range Organics (MRO)	320	50		mg/Kg	1	10/12/2012 12:46:40 PM
Surr: DNOP	108	77.6-140		%REC	1	10/12/2012 12:46:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 6:30:32 PM
Surr: BFB	105	84-116		%REC	1	10/12/2012 6:30:32 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.095	0.033		mg/kg	1	10/16/2012 5:01:40 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 5:43:36 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:43:36 PM
Barium	330	1.0		mg/Kg	10	10/17/2012 3:01:57 PM
Beryllium	0.78	0.75		mg/Kg	5	10/16/2012 5:43:36 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:43:36 PM
Chromium	23	1.5		mg/Kg	5	10/16/2012 5:43:36 PM
Cobalt	4.5	1.5		mg/Kg	5	10/16/2012 5:43:36 PM
Iron	13000	500		mg/Kg	500	10/17/2012 3:14:30 PM
Lead	5.6	1.2		mg/Kg	5	10/16/2012 5:43:36 PM
Manganese	370	1.0		mg/Kg	10	10/17/2012 3:01:57 PM
Nickel	7.1	2.5		mg/Kg	5	10/16/2012 5:43:36 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:44:25 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:43:36 PM
Vanadium	23	12		mg/Kg	5	10/16/2012 5:43:36 PM
Zinc	26	12		mg/Kg	5	10/16/2012 5:43:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Aniline	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Anthracene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Azobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzoic acid	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:45:00 PM
Lab ID: 1210582-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Carbazole	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/12/2012 7:51:10 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Chrysene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 7:51:10 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/12/2012 7:51:10 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/12/2012 7:51:10 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/12/2012 7:51:10 PM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/12/2012 7:51:10 PM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Fluorene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Isophorone	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2-Methylphenol	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Naphthalene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:45:00 PM
Lab ID: 1210582-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/12/2012 7:51:10 PM
Nitrobenzene	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/12/2012 7:51:10 PM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/12/2012 7:51:10 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Phenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Pyrene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Pyridine	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Surr: 2,4,6-Tribromophenol	91.1	21.3-145		%REC	1	10/12/2012 7:51:10 PM
Surr: 2-Fluorobiphenyl	75.4	20-131		%REC	1	10/12/2012 7:51:10 PM
Surr: 2-Fluorophenol	72.2	11.9-130		%REC	1	10/12/2012 7:51:10 PM
Surr: 4-Terphenyl-d14	76.8	25.1-149		%REC	1	10/12/2012 7:51:10 PM
Surr: Nitrobenzene-d5	73.4	25.6-137		%REC	1	10/12/2012 7:51:10 PM
Surr: Phenol-d5	73.9	20.3-132		%REC	1	10/12/2012 7:51:10 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Toluene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Ethylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Xylenes, Total	ND	0.00162		mg/Kg	1	10/11/2012 5:12:48 PM
Methyl tert-butyl ether (MTBE)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2,4-Trimethylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,3,5-Trimethylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dichloroethane (EDC)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dibromoethane (EDB)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Naphthalene	ND	0.00162		mg/Kg	1	10/11/2012 5:12:48 PM
1-Methylnaphthalene	ND	0.00325		mg/Kg	1	10/11/2012 5:12:48 PM
2-Methylnaphthalene	ND	0.00325		mg/Kg	1	10/11/2012 5:12:48 PM
Acetone	0.0187	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
Bromobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Bromodichloromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Bromoform	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Bromomethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
2-Butanone	ND	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
Carbon tetrachloride	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Chlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Chloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:45:00 PM
Lab ID: 1210582-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Chloromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
2-Chlorotoluene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Carbon disulfide	ND	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
4-Chlorotoluene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
cis-1,2-DCE	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
cis-1,3-Dichloropropene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dibromo-3-chloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Dibromochloromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Dibromomethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,3-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,4-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Dichlorodifluoromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1-Dichloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1-Dichloroethene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dichloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,3-Dichloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
2,2-Dichloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1-Dichloropropene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Hexachlorobutadiene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Isopropylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
4-Isopropyltoluene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Methylene chloride	0.0173	0.00244		mg/Kg	1	10/11/2012 5:12:48 PM
n-Butylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
2-Hexanone	ND	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
n-Propylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
sec-Butylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Styrene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
4-Methyl-2-pentanone	ND	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
tert-Butylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1,1,2-Tetrachloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1,2,2-Tetrachloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Tetrachloroethene (PCE)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
trans-1,2-DCE	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
trans-1,3-Dichloropropene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2,3-Trichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2,4-Trichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1,1-Trichloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1,2-Trichloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Trichloroethene (TCE)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Trichlorofluoromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:45:00 PM
Lab ID: 1210582-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Vinyl chloride	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%REC	1	10/11/2012 5:12:48 PM
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	1	10/11/2012 5:12:48 PM
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	10/11/2012 5:12:48 PM
Surr: Toluene-d8	104	70-130		%REC	1	10/11/2012 5:12:48 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (10-12')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:55:00 PM
Lab ID: 1210582-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	2200	96		mg/Kg	10	10/12/2012 12:25:01 PM
Motor Oil Range Organics (MRO)	ND	480		mg/Kg	10	10/12/2012 12:25:01 PM
Surr: DNOP	0	77.6-140	S	%REC	10	10/12/2012 12:25:01 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	220	50		mg/Kg	10	10/12/2012 12:44:56 PM
Surr: BFB	276	84-116	S	%REC	10	10/12/2012 12:44:56 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:03:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 5:50:19 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:50:19 PM
Barium	340	1.0		mg/Kg	10	10/17/2012 3:17:21 PM
Beryllium	0.83	0.75		mg/Kg	5	10/16/2012 5:50:19 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:50:19 PM
Chromium	9.1	1.5		mg/Kg	5	10/16/2012 5:50:19 PM
Cobalt	4.7	1.5		mg/Kg	5	10/16/2012 5:50:19 PM
Iron	13000	500		mg/Kg	500	10/17/2012 3:19:44 PM
Lead	4.5	1.2		mg/Kg	5	10/16/2012 5:50:19 PM
Manganese	340	1.0		mg/Kg	10	10/17/2012 3:17:21 PM
Nickel	7.6	2.5		mg/Kg	5	10/16/2012 5:50:19 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:46:48 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:50:19 PM
Vanadium	21	12		mg/Kg	5	10/16/2012 5:50:19 PM
Zinc	16	12		mg/Kg	5	10/16/2012 5:50:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Aniline	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Anthracene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Azobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzoic acid	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (10-12')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:55:00 PM
Lab ID: 1210582-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Carbazole	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/12/2012 8:20:33 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Chrysene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:20:33 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/12/2012 8:20:33 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/12/2012 8:20:33 PM
2,4-Dimethylphenol	ND	0.59		mg/Kg	1	10/12/2012 8:20:33 PM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/12/2012 8:20:33 PM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Fluorene	1.2	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Isophorone	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
1-Methylnaphthalene	12	2.0		mg/Kg	5	10/14/2012 2:09:29 PM
2-Methylnaphthalene	17	2.0		mg/Kg	5	10/14/2012 2:09:29 PM
2-Methylphenol	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Naphthalene	4.2	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (10-12')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:55:00 PM
Lab ID: 1210582-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/12/2012 8:20:33 PM
Nitrobenzene	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/12/2012 8:20:33 PM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/12/2012 8:20:33 PM
Phenanthrene	2.6	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Phenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Pyrene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Pyridine	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Surr: 2,4,6-Tribromophenol	57.6	21.3-145		%REC	1	10/12/2012 8:20:33 PM
Surr: 2-Fluorobiphenyl	66.5	20-131		%REC	1	10/12/2012 8:20:33 PM
Surr: 2-Fluorophenol	86.9	11.9-130		%REC	1	10/12/2012 8:20:33 PM
Surr: 4-Terphenyl-d14	77.1	25.1-149		%REC	1	10/12/2012 8:20:33 PM
Surr: Nitrobenzene-d5	0	25.6-137	S	%REC	1	10/12/2012 8:20:33 PM
Surr: Phenol-d5	84.7	20.3-132		%REC	1	10/12/2012 8:20:33 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	0.96	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Toluene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Ethylbenzene	7.5	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2,4-Trimethylbenzene	13	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,3,5-Trimethylbenzene	4.2	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Naphthalene	9.1	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1-Methylnaphthalene	14	2.0		mg/Kg	10	10/19/2012 6:53:56 PM
2-Methylnaphthalene	25	2.0		mg/Kg	10	10/19/2012 6:53:56 PM
Acetone	ND	7.5		mg/Kg	10	10/19/2012 6:53:56 PM
Bromobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Bromoform	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Bromomethane	ND	1.5		mg/Kg	10	10/19/2012 6:53:56 PM
2-Butanone	ND	5.0		mg/Kg	10	10/19/2012 6:53:56 PM
Carbon disulfide	ND	5.0		mg/Kg	10	10/19/2012 6:53:56 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
Chlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Chloroethane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (10-12')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:55:00 PM
Lab ID: 1210582-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Chloromethane	ND	1.5		mg/Kg	10	10/19/2012 6:53:56 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Dibromomethane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
2-Hexanone	ND	5.0		mg/Kg	10	10/19/2012 6:53:56 PM
Isopropylbenzene	1.7	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
4-Isopropyltoluene	0.57	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/19/2012 6:53:56 PM
Methylene chloride	ND	1.5		mg/Kg	10	10/19/2012 6:53:56 PM
n-Butylbenzene	2.0	1.5		mg/Kg	10	10/19/2012 6:53:56 PM
n-Propylbenzene	3.3	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
sec-Butylbenzene	1.2	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Styrene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (10-12')
Project: SWMU NO.14
Collection Date: 10/9/2012 1:55:00 PM
Lab ID: 1210582-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Xylenes, Total	12	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%REC	10	10/19/2012 6:53:56 PM
Surr: 4-Bromofluorobenzene	71.0	70-130		%REC	10	10/19/2012 6:53:56 PM
Surr: Dibromofluoromethane	92.6	70-130		%REC	10	10/19/2012 6:53:56 PM
Surr: Toluene-d8	95.7	70-130		%REC	10	10/19/2012 6:53:56 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (17-18')
Project: SWMU NO.14
Collection Date: 10/9/2012 2:10:00 PM
Lab ID: 1210582-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/12/2012 9:02:54 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/12/2012 9:02:54 AM
Surr: DNOP	104	77.6-140		%REC	1	10/12/2012 9:02:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 6:59:20 PM
Surr: BFB	106	84-116		%REC	1	10/12/2012 6:59:20 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:08:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 5:55:27 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:55:27 PM
Barium	290	1.0		mg/Kg	10	10/17/2012 3:22:21 PM
Beryllium	0.87	0.75		mg/Kg	5	10/16/2012 5:55:27 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:55:27 PM
Chromium	8.9	1.5		mg/Kg	5	10/16/2012 5:55:27 PM
Cobalt	5.6	1.5		mg/Kg	5	10/16/2012 5:55:27 PM
Iron	16000	500		mg/Kg	500	10/17/2012 3:27:16 PM
Lead	2.9	1.2		mg/Kg	5	10/16/2012 5:55:27 PM
Manganese	1100	5.0		mg/Kg	50	10/17/2012 3:24:47 PM
Nickel	11	2.5		mg/Kg	5	10/16/2012 5:55:27 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:49:15 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:55:27 PM
Vanadium	ND	12		mg/Kg	5	10/16/2012 5:55:27 PM
Zinc	17	12		mg/Kg	5	10/16/2012 5:55:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (17-18')
Project: SWMU NO.14
Collection Date: 10/9/2012 2:10:00 PM
Lab ID: 1210582-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 8:49:51 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 8:49:51 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 8:49:51 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:49:51 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 8:49:51 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 8:49:51 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (17-18')
Project: SWMU NO.14
Collection Date: 10/9/2012 2:10:00 PM
Lab ID: 1210582-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:49:51 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 8:49:51 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:49:51 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Surr: 2,4,6-Tribromophenol	73.4	21.3-145		%REC	1	10/12/2012 8:49:51 PM
Surr: 2-Fluorobiphenyl	65.9	20-131		%REC	1	10/12/2012 8:49:51 PM
Surr: 2-Fluorophenol	66.9	11.9-130		%REC	1	10/12/2012 8:49:51 PM
Surr: 4-Terphenyl-d14	62.2	25.1-149		%REC	1	10/12/2012 8:49:51 PM
Surr: Nitrobenzene-d5	67.3	25.6-137		%REC	1	10/12/2012 8:49:51 PM
Surr: Phenol-d5	72.3	20.3-132		%REC	1	10/12/2012 8:49:51 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00909	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Toluene	0.00596	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Ethylbenzene	0.00134	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Xylenes, Total	0.00460	0.00216		mg/Kg	1	10/11/2012 5:43:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2,4-Trimethylbenzene	0.00148	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,3,5-Trimethylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dichloroethane (EDC)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dibromoethane (EDB)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Naphthalene	ND	0.00216		mg/Kg	1	10/11/2012 5:43:38 PM
1-Methylnaphthalene	ND	0.00432		mg/Kg	1	10/11/2012 5:43:38 PM
2-Methylnaphthalene	ND	0.00432		mg/Kg	1	10/11/2012 5:43:38 PM
Acetone	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
Bromobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Bromodichloromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Bromoform	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Bromomethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
2-Butanone	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
Carbon tetrachloride	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Chlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Chloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (17-18')
Project: SWMU NO.14
Collection Date: 10/9/2012 2:10:00 PM
Lab ID: 1210582-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Chloromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
2-Chlorotoluene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Carbon disulfide	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
4-Chlorotoluene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
cis-1,2-DCE	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
cis-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dibromo-3-chloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Dibromochloromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Dibromomethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,3-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,4-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Dichlorodifluoromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1-Dichloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1-Dichloroethene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,3-Dichloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
2,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1-Dichloropropene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Hexachlorobutadiene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Isopropylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
4-Isopropyltoluene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Methylene chloride	0.0310	0.00324	E	mg/Kg	1	10/11/2012 5:43:38 PM
n-Butylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
2-Hexanone	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
n-Propylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
sec-Butylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Styrene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
4-Methyl-2-pentanone	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
tert-Butylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1,1,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1,2,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Tetrachloroethene (PCE)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
trans-1,2-DCE	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
trans-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2,3-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2,4-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1,1-Trichloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1,2-Trichloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Trichloroethene (TCE)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Trichlorofluoromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-6 (17-18')
Project: SWMU NO.14
Collection Date: 10/9/2012 2:10:00 PM
Lab ID: 1210582-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Vinyl chloride	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%REC	1	10/11/2012 5:43:38 PM
Surr: 4-Bromofluorobenzene	93.2	70-130		%REC	1	10/11/2012 5:43:38 PM
Surr: Dibromofluoromethane	98.9	70-130		%REC	1	10/11/2012 5:43:38 PM
Surr: Toluene-d8	95.2	70-130		%REC	1	10/11/2012 5:43:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:35:00 PM
Lab ID: 1210582-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	21	10		mg/Kg	1	10/12/2012 2:15:12 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/12/2012 2:15:12 PM
Surr: DNOP	101	77.6-140		%REC	1	10/12/2012 2:15:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 1:13:43 AM
Surr: BFB	113	84-116		%REC	1	10/13/2012 1:13:43 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:10:30 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/16/2012 6:00:28 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 6:00:28 PM
Barium	470	1.0		mg/Kg	10	10/17/2012 3:29:50 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 6:00:28 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 6:00:28 PM
Chromium	5.7	1.5		mg/Kg	5	10/16/2012 6:00:28 PM
Cobalt	3.2	1.5		mg/Kg	5	10/16/2012 6:00:28 PM
Iron	11000	500		mg/Kg	500	10/17/2012 3:34:44 PM
Lead	10	1.2		mg/Kg	5	10/16/2012 6:00:28 PM
Manganese	550	5.0		mg/Kg	50	10/17/2012 3:32:16 PM
Nickel	4.3	2.5		mg/Kg	5	10/16/2012 6:00:28 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:51:43 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 6:00:28 PM
Vanadium	17	12		mg/Kg	5	10/16/2012 6:00:28 PM
Zinc	29	12		mg/Kg	5	10/16/2012 6:00:28 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:35:00 PM
Lab ID: 1210582-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 9:19:12 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 9:19:12 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 9:19:12 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:19:12 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 9:19:12 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 9:19:12 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:35:00 PM
Lab ID: 1210582-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 9:19:12 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 9:19:12 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:19:12 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Surr: 2,4,6-Tribromophenol	86.0	21.3-145		%REC	1	10/12/2012 9:19:12 PM
Surr: 2-Fluorobiphenyl	79.3	20-131		%REC	1	10/12/2012 9:19:12 PM
Surr: 2-Fluorophenol	77.5	11.9-130		%REC	1	10/12/2012 9:19:12 PM
Surr: 4-Terphenyl-d14	76.4	25.1-149		%REC	1	10/12/2012 9:19:12 PM
Surr: Nitrobenzene-d5	80.9	25.6-137		%REC	1	10/12/2012 9:19:12 PM
Surr: Phenol-d5	81.7	20.3-132		%REC	1	10/12/2012 9:19:12 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00192	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Toluene	0.00300	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Ethylbenzene	0.00194	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Xylenes, Total	0.0128	0.00161		mg/Kg	1	10/11/2012 6:14:26 PM
Methyl tert-butyl ether (MTBE)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2,4-Trimethylbenzene	0.00163	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,3,5-Trimethylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dichloroethane (EDC)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dibromoethane (EDB)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Naphthalene	ND	0.00161		mg/Kg	1	10/11/2012 6:14:26 PM
1-Methylnaphthalene	ND	0.00322		mg/Kg	1	10/11/2012 6:14:26 PM
2-Methylnaphthalene	ND	0.00322		mg/Kg	1	10/11/2012 6:14:26 PM
Acetone	0.627	0.00805	E	mg/Kg	1	10/11/2012 6:14:26 PM
Bromobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Bromodichloromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Bromoform	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Bromomethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
2-Butanone	0.0217	0.00805		mg/Kg	1	10/11/2012 6:14:26 PM
Carbon tetrachloride	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Chlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Chloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:35:00 PM
Lab ID: 1210582-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Chloromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
2-Chlorotoluene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Carbon disulfide	ND	0.00805		mg/Kg	1	10/11/2012 6:14:26 PM
4-Chlorotoluene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
cis-1,2-DCE	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
cis-1,3-Dichloropropene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dibromo-3-chloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Dibromochloromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Dibromomethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,3-Dichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,4-Dichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Dichlorodifluoromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1-Dichloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1-Dichloroethene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dichloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,3-Dichloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
2,2-Dichloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1-Dichloropropene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Hexachlorobutadiene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Isopropylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
4-Isopropyltoluene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Methylene chloride	ND	0.00242		mg/Kg	1	10/11/2012 6:14:26 PM
n-Butylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
2-Hexanone	ND	0.00805		mg/Kg	1	10/11/2012 6:14:26 PM
n-Propylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
sec-Butylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Styrene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
4-Methyl-2-pentanone	ND	0.00805		mg/Kg	1	10/11/2012 6:14:26 PM
tert-Butylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1,1,2-Tetrachloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1,2,2-Tetrachloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Tetrachloroethene (PCE)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
trans-1,2-DCE	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
trans-1,3-Dichloropropene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2,3-Trichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2,4-Trichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1,1-Trichloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1,2-Trichloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Trichloroethene (TCE)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Trichlorofluoromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:35:00 PM
Lab ID: 1210582-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Vinyl chloride	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%REC	1	10/11/2012 6:14:26 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/11/2012 6:14:26 PM
Surr: Dibromofluoromethane	92.4	70-130		%REC	1	10/11/2012 6:14:26 PM
Surr: Toluene-d8	86.5	70-130		%REC	1	10/11/2012 6:14:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:45:00 PM
Lab ID: 1210582-006
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/12/2012 9:24:29 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/12/2012 9:24:29 AM
Surr: DNOP	102	77.6-140		%REC	1	10/12/2012 9:24:29 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 1:42:26 AM
Surr: BFB	105	84-116		%REC	1	10/13/2012 1:42:26 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:12:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/23/2012 7:54:10 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 6:14:02 PM
Barium	750	5.0		mg/Kg	50	10/17/2012 3:52:04 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 6:14:02 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 6:14:02 PM
Chromium	7.4	1.5		mg/Kg	5	10/16/2012 6:14:02 PM
Cobalt	3.9	1.5		mg/Kg	5	10/16/2012 6:14:02 PM
Iron	12000	500		mg/Kg	500	10/17/2012 3:54:29 PM
Lead	5.0	1.2		mg/Kg	5	10/16/2012 6:14:02 PM
Manganese	550	5.0		mg/Kg	50	10/17/2012 3:52:04 PM
Nickel	6.1	2.5		mg/Kg	5	10/16/2012 6:14:02 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:54:10 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 6:14:02 PM
Vanadium	16	12		mg/Kg	5	10/16/2012 6:14:02 PM
Zinc	22	12		mg/Kg	5	10/16/2012 6:14:02 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:45:00 PM
Lab ID: 1210582-006
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 9:48:27 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 9:48:27 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 9:48:27 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:48:27 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 9:48:27 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 9:48:27 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:45:00 PM
Lab ID: 1210582-006
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 9:48:27 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 9:48:27 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:48:27 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Surr: 2,4,6-Tribromophenol	68.3	21.3-145		%REC	1	10/12/2012 9:48:27 PM
Surr: 2-Fluorobiphenyl	71.2	20-131		%REC	1	10/12/2012 9:48:27 PM
Surr: 2-Fluorophenol	64.8	11.9-130		%REC	1	10/12/2012 9:48:27 PM
Surr: 4-Terphenyl-d14	63.8	25.1-149		%REC	1	10/12/2012 9:48:27 PM
Surr: Nitrobenzene-d5	68.6	25.6-137		%REC	1	10/12/2012 9:48:27 PM
Surr: Phenol-d5	70.9	20.3-132		%REC	1	10/12/2012 9:48:27 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00145	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Toluene	0.00126	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Xylenes, Total	ND	0.00207		mg/Kg	1	10/11/2012 6:45:11 PM
Methyl tert-butyl ether (MTBE)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Naphthalene	ND	0.00207		mg/Kg	1	10/11/2012 6:45:11 PM
1-Methylnaphthalene	ND	0.00415		mg/Kg	1	10/11/2012 6:45:11 PM
2-Methylnaphthalene	ND	0.00415		mg/Kg	1	10/11/2012 6:45:11 PM
Acetone	0.0315	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
Bromobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Bromoform	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Bromomethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
2-Butanone	ND	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Chloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:45:00 PM
Lab ID: 1210582-006
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Chloromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Dibromomethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Methylene chloride	0.0142	0.00311		mg/Kg	1	10/11/2012 6:45:11 PM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
2-Hexanone	ND	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Styrene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/9/2012 3:45:00 PM
Lab ID: 1210582-006
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/11/2012 6:45:11 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	1	10/11/2012 6:45:11 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/11/2012 6:45:11 PM
Surr: Toluene-d8	97.9	70-130		%REC	1	10/11/2012 6:45:11 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (8-10')
Project: SWMU NO.14
Collection Date: 10/9/2012 4:00:00 PM
Lab ID: 1210582-007
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/12/2012 9:46:10 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/12/2012 9:46:10 AM
Surr: DNOP	104	77.6-140		%REC	1	10/12/2012 9:46:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 2:11:08 AM
Surr: BFB	105	84-116		%REC	1	10/13/2012 2:11:08 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:21:15 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/23/2012 7:56:35 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 6:18:57 PM
Barium	160	0.50		mg/Kg	5	10/16/2012 6:18:57 PM
Beryllium	0.91	0.75		mg/Kg	5	10/16/2012 6:18:57 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 6:18:57 PM
Chromium	8.0	1.5		mg/Kg	5	10/16/2012 6:18:57 PM
Cobalt	4.3	1.5		mg/Kg	5	10/16/2012 6:18:57 PM
Iron	12000	500		mg/Kg	500	10/17/2012 3:57:07 PM
Lead	4.7	1.2		mg/Kg	5	10/16/2012 6:18:57 PM
Manganese	220	0.50		mg/Kg	5	10/16/2012 6:18:57 PM
Nickel	7.3	2.5		mg/Kg	5	10/16/2012 6:18:57 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:56:35 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 6:18:57 PM
Vanadium	14	12		mg/Kg	5	10/16/2012 6:18:57 PM
Zinc	13	12		mg/Kg	5	10/16/2012 6:18:57 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (8-10')
Project: SWMU NO.14
Collection Date: 10/9/2012 4:00:00 PM
Lab ID: 1210582-007
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 10:17:34 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 10:17:34 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 10:17:34 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 10:17:34 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 10:17:34 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 10:17:34 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (8-10')
Project: SWMU NO.14
Collection Date: 10/9/2012 4:00:00 PM
Lab ID: 1210582-007
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 10:17:34 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 10:17:34 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 10:17:34 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Surr: 2,4,6-Tribromophenol	86.4	21.3-145		%REC	1	10/12/2012 10:17:34 PM
Surr: 2-Fluorobiphenyl	75.8	20-131		%REC	1	10/12/2012 10:17:34 PM
Surr: 2-Fluorophenol	78.0	11.9-130		%REC	1	10/12/2012 10:17:34 PM
Surr: 4-Terphenyl-d14	69.7	25.1-149		%REC	1	10/12/2012 10:17:34 PM
Surr: Nitrobenzene-d5	81.3	25.6-137		%REC	1	10/12/2012 10:17:34 PM
Surr: Phenol-d5	84.8	20.3-132		%REC	1	10/12/2012 10:17:34 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Toluene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Ethylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Xylenes, Total	ND	0.00186		mg/Kg	1	10/11/2012 7:15:55 PM
Methyl tert-butyl ether (MTBE)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2,4-Trimethylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,3,5-Trimethylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dichloroethane (EDC)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dibromoethane (EDB)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Naphthalene	ND	0.00186		mg/Kg	1	10/11/2012 7:15:55 PM
1-Methylnaphthalene	ND	0.00373		mg/Kg	1	10/11/2012 7:15:55 PM
2-Methylnaphthalene	ND	0.00373		mg/Kg	1	10/11/2012 7:15:55 PM
Acetone	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
Bromobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Bromodichloromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Bromoform	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Bromomethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
2-Butanone	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
Carbon tetrachloride	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Chlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Chloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-21 (8-10')
Project: SWMU NO.14
Collection Date: 10/9/2012 4:00:00 PM
Lab ID: 1210582-007
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Chloromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
2-Chlorotoluene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Carbon disulfide	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
4-Chlorotoluene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
cis-1,2-DCE	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
cis-1,3-Dichloropropene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dibromo-3-chloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Dibromochloromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Dibromomethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,3-Dichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,4-Dichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Dichlorodifluoromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1-Dichloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1-Dichloroethene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dichloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,3-Dichloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
2,2-Dichloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1-Dichloropropene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Hexachlorobutadiene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Isopropylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
4-Isopropyltoluene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Methylene chloride	0.00978	0.00279		mg/Kg	1	10/11/2012 7:15:55 PM
n-Butylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
2-Hexanone	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
n-Propylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
sec-Butylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Styrene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
4-Methyl-2-pentanone	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
tert-Butylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1,1,2-Tetrachloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1,2,2-Tetrachloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Tetrachloroethene (PCE)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
trans-1,2-DCE	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
trans-1,3-Dichloropropene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2,3-Trichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2,4-Trichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1,1-Trichloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1,2-Trichloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Trichloroethene (TCE)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Trichlorofluoromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM

Qualifiers:

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Client Sample ID: SWMU 14-21 (8-10')
Project: SWMU NO.14
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Lab ID: 1210582-007
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Vinyl chloride	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%REC	1	10/11/2012 7:15:55 PM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	1	10/11/2012 7:15:55 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/11/2012 7:15:55 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	10/11/2012 7:15:55 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121012039
Project Name: 1210582

Analytical Results Report

Sample Number 121012039-001 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:17 PM
Client Sample ID 1210582-001D / SWMU 14-6 (0-0.5) **Sampling Time** 1:35 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	4	Percent		10/26/2012	CRW	%moisture	

Sample Number 121012039-002 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:17 PM
Client Sample ID 1210582-002D / SWMU 14-6 (1.5-2) **Sampling Time** 1:45 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	10.1	Percent		10/26/2012	CRW	%moisture	

Sample Number 121012039-003 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:17 PM
Client Sample ID 1210582-003D / SWMU 14-6 (10-12) **Sampling Time** 1:55 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	16.8	Percent		10/26/2012	CRW	%moisture	

Sample Number 121012039-004 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:17 PM
Client Sample ID 1210582-004D / SWMU 14-6 (17-18) **Sampling Time** 2:10 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	14.2	Percent		10/26/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121012039
Project Name: 1210582

Analytical Results Report

Sample Number 121012039-005 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:17 PM
Client Sample ID 1210582-005D / SWMU 14-21 (0-0.5) **Sampling Time** 3:35 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	1.3	Percent		10/26/2012	CRW	%moisture	

Sample Number 121012039-006 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:17 PM
Client Sample ID 1210582-006D / SWMU 14-21 (1.5-2) **Sampling Time** 3:45 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	10	Percent		10/26/2012	CRW	%moisture	

Sample Number 121012039-007 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:17 PM
Client Sample ID 1210582-007D / SWMU 14-21 (8-10) **Sampling Time** 4:00 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	19.4	Percent		10/26/2012	CRW	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4254** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4254** RunNo: **6180**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178120** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID **LCS-4254** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4254** RunNo: **6180**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178205** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.4	52.6	130			
Surr: DNOP	4.4		5.000		88.5	77.6	140			

Sample ID **1210582-001CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 14-6 (0-0.5')** Batch ID: **4254** RunNo: **6180**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178471** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.9	49.60	0	115	57.2	146			
Surr: DNOP	3.3		4.960		65.9	77.6	140			S

Sample ID **1210582-001CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **SWMU 14-6 (0-0.5')** Batch ID: **4254** RunNo: **6180**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178474** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.9	49.26	0	123	57.2	146	6.62	24.5	
Surr: DNOP	3.5		4.926		71.7	77.6	140	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178737** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178738** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID **1210582-004BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 14-6 (17-18')** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178751** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.2	5.0	18.26	0	39.3	70	130			S
Surr: BFB	780		730.5		107	84	116			

Sample ID **1210582-004BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SWMU 14-6 (17-18')** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178752** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	18.26	0	87.4	70	130	76.0	22.1	R
Surr: BFB	800		730.5		109	84	116	0	0	

Sample ID **B27** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178761** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	84	116			

Sample ID **2.5UG GRO LCS-II** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **178762** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	74	117			
Surr: BFB	1100		1000		112	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**1210653-005BMS**	SampType:	**MS**	TestCode:	**EPA Method 8015B: Gasoline Range**
Client ID:	**BatchQC**	Batch ID:	**R6205**	RunNo:	**6205**
Prep Date:		Analysis Date:	**10/12/2012**	SeqNo:	**178768** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	70	130			
Surr: BFB	1100		1000		113	84	116			

Sample ID	**1210653-005BMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015B: Gasoline Range**
Client ID:	**BatchQC**	Batch ID:	**R6205**	RunNo:	**6205**
Prep Date:		Analysis Date:	**10/12/2012**	SeqNo:	**178769** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	70	130	7.96	22.1	
Surr: BFB	1200		1000		117	84	116	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R6394**	RunNo: **6394**	
Prep Date:	Analysis Date: **10/19/2012**	SeqNo: **184052**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184052** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.8	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID **100ng lcsc** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184056** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	114	70	130			
Toluene	1.0	0.050	1.000	0	102	80	120			
Chlorobenzene	1.0	0.050	1.000	0	100	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	108	74	124			
Trichloroethene (TCE)	0.95	0.050	1.000	0	94.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcsc** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184056** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		90.1	70	130			
Surr: Toluene-d8	0.46		0.5000		91.1	70	130			

Sample ID **1210582-003bms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 14-6 (10-12')** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184057** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.0	0.50	5.641	0.9563	108	80.9	118			
Toluene	5.9	0.50	5.641	0.06927	104	69.5	119			
Chlorobenzene	5.8	0.50	5.641	0	104	75.7	115			
1,1-Dichloroethene	5.8	0.50	5.641	0	103	68.6	126			
Trichloroethene (TCE)	5.2	0.50	5.641	0	92.0	68.7	115			
Surr: 1,2-Dichloroethane-d4	2.7		2.820		95.2	70	130			
Surr: 4-Bromofluorobenzene	2.1		2.820		73.3	70	130			
Surr: Dibromofluoromethane	2.7		2.820		95.5	70	130			
Surr: Toluene-d8	2.7		2.820		95.6	70	130			

Sample ID **1210582-003bmsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SWMU 14-6 (10-12')** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184058** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.1	0.50	5.641	0.9563	109	80.9	118	0.812	20	
Toluene	5.7	0.50	5.641	0.06927	100	69.5	119	3.36	20	
Chlorobenzene	5.7	0.50	5.641	0	101	75.7	115	2.30	20	
1,1-Dichloroethene	5.6	0.50	5.641	0	99.4	68.6	126	3.18	24.8	
Trichloroethene (TCE)	5.2	0.50	5.641	0	91.9	68.7	115	0.0761	20	
Surr: 1,2-Dichloroethane-d4	2.8		2.820		98.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.820		69.9	70	130	0	0	S
Surr: Dibromofluoromethane	2.7		2.820		95.4	70	130	0	0	
Surr: Toluene-d8	2.6		2.820		93.2	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4251**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4251**	RunNo: **6184**			
Prep Date: **10/11/2012**	Analysis Date: **10/11/2012**	SeqNo: **178168**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4251** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4251** RunNo: **6184**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **178168** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.4		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	44.5		50.00		89.0	70	130			
Surr: Dibromofluoromethane	45.4		50.00		90.9	70	130			
Surr: Toluene-d8	43.9		50.00		87.8	70	130			

Sample ID **lcs-4251** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4251** RunNo: **6184**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **180403** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9.63	1.00	10.00	0	96.3	60	140			
Toluene	9.93	1.00	10.00	0	99.3	60	140			
Chlorobenzene	10.3	1.00	10.00	0	103	60	140			
1,1-Dichloroethene	11.1	1.00	10.00	0	111	60	140			
Trichloroethene (TCE)	8.17	1.00	10.00	0	81.7	60	140			
Surr: 1,2-Dichloroethane-d4	45.2		50.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**lcs-4251**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4251**	RunNo:	**6184**
Prep Date:	**10/11/2012**	Analysis Date:	**10/11/2012**	SeqNo:	**180403** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.8		50.00		93.5	70	130			
Surr: Toluene-d8	49.1		50.00		98.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4255**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4255**	RunNo: **6206**			
Prep Date: **10/11/2012**	Analysis Date: **10/12/2012**	SeqNo: **178793**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4255** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178793** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		96.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		90.7	20	131			
Surr: 2-Fluorophenol	3.0		3.330		91.3	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		76.4	25.1	149			
Surr: Nitrobenzene-d5	1.6		1.670		93.7	25.6	137			
Surr: Phenol-d5	3.1		3.330		94.4	20.3	132			

Sample ID **lcs-4255** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178794** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-4255** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178794** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	73.9	49.7	98.1			
4-Chloro-3-methylphenol	2.7	0.50	3.330	0	80.8	43.8	89.1			
2-Chlorophenol	2.2	0.20	3.330	0	67.4	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	67.6	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.6	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	81.4	39.1	86.9			
4-Nitrophenol	2.6	0.25	3.330	0	77.3	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.9	36.2	80			
Phenol	2.4	0.20	3.330	0	72.3	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	71.3	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.3		1.670		76.3	20	131			
Surr: 2-Fluorophenol	2.2		3.330		66.5	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		74.0	25.1	149			
Surr: Nitrobenzene-d5	1.3		1.670		77.6	25.6	137			
Surr: Phenol-d5	2.6		3.330		77.6	20.3	132			

Sample ID **1210582-001Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 14-6 (0-0.5')** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178807** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.91	0.40	1.667	0.1738	44.2	38.6	100			
4-Chloro-3-methylphenol	1.9	1.0	3.324	0	55.7	35.8	108			
2-Chlorophenol	1.7	0.40	3.324	0	51.8	48.2	96.1			
1,4-Dichlorobenzene	0.85	0.40	1.667	0	51.1	42.5	97.6			
2,4-Dinitrotoluene	ND	1.0	1.667	0	42.5	51.2	108			S
N-Nitrosodi-n-propylamine	1.0	0.40	1.667	0	61.2	31.6	114			
4-Nitrophenol	1.9	0.50	3.324	0	58.2	22.7	144			
Pentachlorophenol	1.5	0.80	3.324	0	46.2	24	109			
Phenol	1.8	0.40	3.324	0	54.0	33.1	108			
Pyrene	0.90	0.40	1.667	0	53.9	42.7	98.9			
1,2,4-Trichlorobenzene	0.85	0.40	1.667	0	50.7	27.1	118			
Surr: 2,4,6-Tribromophenol	2.0		3.324		59.6	21.3	145			
Surr: 2-Fluorobiphenyl	0.91		1.667		54.4	20	131			
Surr: 2-Fluorophenol	1.8		3.324		53.2	11.9	130			
Surr: 4-Terphenyl-d14	0.85		1.667		51.2	25.1	149			
Surr: Nitrobenzene-d5	0.89		1.667		53.3	25.6	137			
Surr: Phenol-d5	2.1		3.324		62.2	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210582-001Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SWMU 14-6 (0-0.5')** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178808** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.76	0.40	1.660	0.1738	35.2	38.6	100	18.3	20	S
4-Chloro-3-methylphenol	1.6	0.99	3.310	0	47.7	35.8	108	15.8	20	
2-Chlorophenol	1.5	0.40	3.310	0	44.1	48.2	96.1	16.5	20	S
1,4-Dichlorobenzene	0.67	0.40	1.660	0	40.4	42.5	97.6	23.7	20	SR
2,4-Dinitrotoluene	ND	0.99	1.660	0	33.7	51.2	108	0	20	SR
N-Nitrosodi-n-propylamine	0.77	0.40	1.660	0	46.3	31.6	114	28.0	20	R
4-Nitrophenol	1.6	0.50	3.310	0	48.0	22.7	144	19.5	20	
Pentachlorophenol	1.3	0.80	3.310	0	38.4	24	109	19.0	20	
Phenol	1.4	0.40	3.310	0	43.3	33.1	108	22.5	20	R
Pyrene	0.74	0.40	1.660	0	44.7	42.7	98.9	19.0	20	
1,2,4-Trichlorobenzene	0.69	0.40	1.660	0	41.5	27.1	118	20.3	20	R
Surr: 2,4,6-Tribromophenol	1.6		3.310		48.8	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	0.72		1.660		43.6	20	131	0	0	
Surr: 2-Fluorophenol	1.5		3.310		44.6	11.9	130	0	0	
Surr: 4-Terphenyl-d14	0.68		1.660		41.2	25.1	149	0	0	
Surr: Nitrobenzene-d5	0.71		1.660		42.8	25.6	137	0	0	
Surr: Phenol-d5	1.6		3.310		47.6	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4314** SampType: **mblk** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180677** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4314** SampType: **lcs** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180678** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	100	80	120			

Sample ID **1210582-006CMS** SampType: **ms** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 14-21 (1.5-2')** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180706** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1669	0.01973	92.8	75	125			

Sample ID **1210582-006CMSD** SampType: **msd** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 14-21 (1.5-2')** Batch ID: **4314** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180707** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1660	0.01973	95.3	75	125	1.94	20	

Sample ID **MB-4317** SampType: **mblk** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180708** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4317** SampType: **lcs** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180709** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.7	80	120			

Sample ID **1210656-004CMS** SampType: **ms** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180735** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1654	0	96.4	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**1210656-004CMSD**	SampType:	**msd**	TestCode:	**EPA Method 7471: Mercury**
Client ID:	**BatchQC**	Batch ID:	**4317**	RunNo:	**6270**
Prep Date:	**10/15/2012**	Analysis Date:	**10/16/2012**	SeqNo:	**180736** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1655	0	96.8	75	125	0.493	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4298** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180997** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4298** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181002** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	22	2.5	25.00	0	86.4	80	120			
Arsenic	26	2.5	25.00	0	105	80	120			
Barium	25	0.10	25.00	0	98.6	80	120			
Beryllium	26	0.15	25.00	0	104	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	25	0.30	25.00	0	98.3	80	120			
Cobalt	24	0.30	25.00	0	98.0	80	120			
Lead	25	0.25	25.00	0	102	80	120			
Manganese	24	0.10	25.00	0.03550	97.1	80	120			
Nickel	24	0.50	25.00	0	97.2	80	120			
Selenium	25	2.5	25.00	0	101	80	120			
Silver	5.1	0.25	5.000	0.06650	100	80	120			
Vanadium	25	2.5	25.00	0	100	80	120			
Zinc	25	2.5	25.00	0	101	80	120			

Sample ID **1210521-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.89	0	0	75	125			S
Arsenic	23	12	24.89	0	90.6	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210582**
14-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210521-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	25	0.75	24.89	0.6775	98.5	75	125			
Cadmium	23	0.50	24.89	0	92.7	75	125			
Chromium	38	1.5	24.89	9.549	114	75	125			
Cobalt	28	1.5	24.89	5.096	90.8	75	125			
Lead	29	1.2	24.89	9.267	80.3	75	125			
Nickel	35	2.5	24.89	8.978	106	75	125			
Selenium	22	12	24.89	0	89.0	75	125			
Silver	4.5	1.2	4.978	0	90.5	75	125			
Vanadium	48	12	24.89	23.50	97.8	75	125			
Zinc	64	12	24.89	33.89	120	75	125			

Sample ID **1210521-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4298** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181046** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.80	0	0	75	125	0	20	S
Arsenic	22	12	24.80	0	88.1	75	125	3.10	20	
Beryllium	25	0.75	24.80	0.6775	97.4	75	125	1.43	20	
Cadmium	23	0.50	24.80	0	91.2	75	125	1.97	20	
Chromium	33	1.5	24.80	9.549	93.6	75	125	14.6	20	
Cobalt	26	1.5	24.80	5.096	84.8	75	125	5.79	20	
Lead	30	1.2	24.80	9.267	81.9	75	125	1.10	20	
Nickel	30	2.5	24.80	8.978	86.2	75	125	15.4	20	
Selenium	ND	12	24.80	0	0	75	125	200	20	SR
Silver	4.5	1.2	4.960	0	91.3	75	125	0.532	20	
Vanadium	50	12	24.80	23.50	108	75	125	5.11	20	
Zinc	54	12	24.80	33.89	80.8	75	125	16.9	20	

Sample ID **MB-4298** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4298** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181594** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID **LCS-4298** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4298** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181595** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0	106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210582

Received by/date: MG 10/11/12

Logged By: **Michelle Garcia** 10/11/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/11/2012 8:31:36 AM Michelle Garcia

Reviewed By: 10/11/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210582	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/9/12	1335	SOIL	SWMU 14-6(0-0.5')	2 VIALS	SOBI	-001										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1345		SWMU 14-6(1.5-2')	2 VIALS	SOBI	-002										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1355		SWMU 14-6(10-12')	2 VIALS	MeOH	-003										X						
				3 JARS	—											X	X	X	X			
	1410		SWMU 14-6(17-18')	2 VIALS	SOBI	-004										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/10/12	0735	[signature]	[signature]	10/10/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210582	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/9/12	1535	SOIL	SWMU 14-21(0-0.5')	2 VIALS	SOBI	-005										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1545		SWMU 14-21(1.5-2')	2 VIALS	SOBI	-006										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1600		SWMU 14-21(8-10')	2 VIALS	SOBI	-007										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/10/12	0735	[signature]	[signature]	10/11/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cn

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 12, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU No.14 OrderNo.: 1210583

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/11/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (0-0.5')
Project: SWMU No.14
Collection Date: 10/9/2012 4:45:00 PM
Lab ID: 1210583-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	150	10		mg/Kg	1	10/12/2012 1:51:40 PM
Motor Oil Range Organics (MRO)	96	50		mg/Kg	1	10/12/2012 1:51:40 PM
Surr: DNOP	91.5	77.6-140		%REC	1	10/12/2012 1:51:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 2:39:53 AM
Surr: BFB	106	84-116		%REC	1	10/13/2012 2:39:53 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.083	0.033		mg/kg	1	10/16/2012 5:23:03 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	12		mg/Kg	5	10/23/2012 7:59:00 PM
Arsenic	ND	12		mg/Kg	5	10/23/2012 7:59:00 PM
Barium	630	2.0		mg/Kg	20	10/23/2012 8:18:50 PM
Beryllium	0.90	0.75		mg/Kg	5	10/17/2012 2:07:35 PM
Cadmium	ND	0.50		mg/Kg	5	10/17/2012 2:07:35 PM
Chromium	12	1.5		mg/Kg	5	10/17/2012 2:07:35 PM
Cobalt	5.5	1.5		mg/Kg	5	10/17/2012 2:07:35 PM
Iron	15000	500		mg/Kg	500	10/17/2012 2:19:56 PM
Lead	5.9	1.2		mg/Kg	5	10/17/2012 2:07:35 PM
Manganese	550	2.0		mg/Kg	20	10/23/2012 8:18:50 PM
Nickel	8.3	2.5		mg/Kg	5	10/17/2012 2:07:35 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:59:00 PM
Silver	ND	1.2		mg/Kg	5	10/17/2012 2:07:35 PM
Vanadium	25	12		mg/Kg	5	10/17/2012 2:07:35 PM
Zinc	33	12		mg/Kg	5	10/17/2012 2:07:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
Benzyl alcohol	0.26	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (0-0.5')
Project: SWMU No.14
Collection Date: 10/9/2012 4:45:00 PM
Lab ID: 1210583-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 10:46:37 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 10:46:37 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 10:46:37 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 10:46:37 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 10:46:37 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 10:46:37 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (0-0.5')
Project: SWMU No.14
Collection Date: 10/9/2012 4:45:00 PM
Lab ID: 1210583-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 10:46:37 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 10:46:37 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 10:46:37 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Surr: 2,4,6-Tribromophenol	80.5	21.3-145		%REC	1	10/12/2012 10:46:37 PM
Surr: 2-Fluorobiphenyl	76.4	20-131		%REC	1	10/12/2012 10:46:37 PM
Surr: 2-Fluorophenol	72.4	11.9-130		%REC	1	10/12/2012 10:46:37 PM
Surr: 4-Terphenyl-d14	72.9	25.1-149		%REC	1	10/12/2012 10:46:37 PM
Surr: Nitrobenzene-d5	72.7	25.6-137		%REC	1	10/12/2012 10:46:37 PM
Surr: Phenol-d5	79.2	20.3-132		%REC	1	10/12/2012 10:46:37 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00124	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Toluene	0.00318	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Ethylbenzene	0.00152	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Xylenes, Total	0.00894	0.00189		mg/Kg	1	10/11/2012 7:46:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2,4-Trimethylbenzene	0.00263	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,3,5-Trimethylbenzene	0.000983	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dichloroethane (EDC)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dibromoethane (EDB)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Naphthalene	ND	0.00189		mg/Kg	1	10/11/2012 7:46:38 PM
1-Methylnaphthalene	ND	0.00378		mg/Kg	1	10/11/2012 7:46:38 PM
2-Methylnaphthalene	ND	0.00378		mg/Kg	1	10/11/2012 7:46:38 PM
Acetone	0.480	0.00946	E	mg/Kg	1	10/11/2012 7:46:38 PM
Bromobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Bromodichloromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Bromoform	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Bromomethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
2-Butanone	0.0165	0.00946		mg/Kg	1	10/11/2012 7:46:38 PM
Carbon tetrachloride	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Chlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Chloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

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Project: SWMU No.14
Collection Date: 10/9/2012 4:45:00 PM
Lab ID: 1210583-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Chloromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
2-Chlorotoluene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Carbon disulfide	ND	0.00946		mg/Kg	1	10/11/2012 7:46:38 PM
4-Chlorotoluene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
cis-1,2-DCE	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
cis-1,3-Dichloropropene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dibromo-3-chloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Dibromochloromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Dibromomethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,3-Dichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,4-Dichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Dichlorodifluoromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1-Dichloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1-Dichloroethene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dichloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,3-Dichloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
2,2-Dichloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1-Dichloropropene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Hexachlorobutadiene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Isopropylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
4-Isopropyltoluene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Methylene chloride	0.00694	0.00284		mg/Kg	1	10/11/2012 7:46:38 PM
n-Butylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
2-Hexanone	ND	0.00946		mg/Kg	1	10/11/2012 7:46:38 PM
n-Propylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
sec-Butylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Styrene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
4-Methyl-2-pentanone	ND	0.00946		mg/Kg	1	10/11/2012 7:46:38 PM
tert-Butylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1,1,2-Tetrachloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1,2,2-Tetrachloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Tetrachloroethene (PCE)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
trans-1,2-DCE	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
trans-1,3-Dichloropropene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2,3-Trichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2,4-Trichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1,1-Trichloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1,2-Trichloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Trichloroethene (TCE)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Trichlorofluoromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (0-0.5')
Project: SWMU No.14
Collection Date: 10/9/2012 4:45:00 PM
Lab ID: 1210583-001
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Vinyl chloride	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%REC	1	10/11/2012 7:46:38 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	10/11/2012 7:46:38 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/11/2012 7:46:38 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/11/2012 7:46:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (1.5-2')
Project: SWMU No.14
Collection Date: 10/9/2012 4:55:00 PM
Lab ID: 1210583-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	90	9.9		mg/Kg	1	10/12/2012 2:58:30 PM
Motor Oil Range Organics (MRO)	60	49		mg/Kg	1	10/12/2012 2:58:30 PM
Surr: DNOP	107	77.6-140		%REC	1	10/12/2012 2:58:30 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 3:08:37 AM
Surr: BFB	106	84-116		%REC	1	10/13/2012 3:08:37 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.050	0.033		mg/kg	1	10/16/2012 5:24:51 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 8:21:15 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 12:11:16 PM
Barium	430	1.0		mg/Kg	10	10/17/2012 2:22:31 PM
Beryllium	0.83	0.30		mg/Kg	2	10/17/2012 12:11:16 PM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 12:11:16 PM
Chromium	10	0.60		mg/Kg	2	10/17/2012 12:11:16 PM
Cobalt	4.2	0.60		mg/Kg	2	10/17/2012 12:11:16 PM
Iron	14000	500		mg/Kg	500	10/17/2012 2:24:56 PM
Lead	4.3	0.50		mg/Kg	2	10/17/2012 12:11:16 PM
Manganese	540	2.0		mg/Kg	20	10/23/2012 8:23:45 PM
Nickel	7.2	1.0		mg/Kg	2	10/17/2012 12:11:16 PM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 8:21:15 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 12:11:16 PM
Vanadium	17	5.0		mg/Kg	2	10/17/2012 12:11:16 PM
Zinc	20	5.0		mg/Kg	2	10/17/2012 12:11:16 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzoic acid	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (1.5-2')
Project: SWMU No.14
Collection Date: 10/9/2012 4:55:00 PM
Lab ID: 1210583-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 11:15:41 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 11:15:41 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 11:15:41 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 11:15:41 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 11:15:41 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 11:15:41 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Isophorone	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2-Methylphenol	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

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Lab ID: 1210583-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 11:15:41 PM
Nitrobenzene	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 11:15:41 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 11:15:41 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Pyridine	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Surr: 2,4,6-Tribromophenol	82.2	21.3-145		%REC	1	10/12/2012 11:15:41 PM
Surr: 2-Fluorobiphenyl	77.8	20-131		%REC	1	10/12/2012 11:15:41 PM
Surr: 2-Fluorophenol	66.2	11.9-130		%REC	1	10/12/2012 11:15:41 PM
Surr: 4-Terphenyl-d14	68.0	25.1-149		%REC	1	10/12/2012 11:15:41 PM
Surr: Nitrobenzene-d5	78.3	25.6-137		%REC	1	10/12/2012 11:15:41 PM
Surr: Phenol-d5	76.2	20.3-132		%REC	1	10/12/2012 11:15:41 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.000971	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Toluene	0.00135	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Ethylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Xylenes, Total	ND	0.00178		mg/Kg	1	10/11/2012 8:17:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2,4-Trimethylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,3,5-Trimethylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dichloroethane (EDC)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dibromoethane (EDB)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Naphthalene	ND	0.00178		mg/Kg	1	10/11/2012 8:17:30 PM
1-Methylnaphthalene	ND	0.00356		mg/Kg	1	10/11/2012 8:17:30 PM
2-Methylnaphthalene	ND	0.00356		mg/Kg	1	10/11/2012 8:17:30 PM
Acetone	0.0505	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
Bromobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Bromodichloromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Bromoform	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Bromomethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
2-Butanone	ND	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
Carbon tetrachloride	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Chlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Chloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (1.5-2')
Project: SWMU No.14
Collection Date: 10/9/2012 4:55:00 PM
Lab ID: 1210583-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Chloromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
2-Chlorotoluene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Carbon disulfide	ND	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
4-Chlorotoluene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
cis-1,2-DCE	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
cis-1,3-Dichloropropene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dibromo-3-chloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Dibromochloromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Dibromomethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,3-Dichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,4-Dichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Dichlorodifluoromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1-Dichloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1-Dichloroethene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dichloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,3-Dichloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
2,2-Dichloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1-Dichloropropene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Hexachlorobutadiene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Isopropylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
4-Isopropyltoluene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Methylene chloride	ND	0.00267		mg/Kg	1	10/11/2012 8:17:30 PM
n-Butylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
2-Hexanone	ND	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
n-Propylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
sec-Butylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Styrene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
4-Methyl-2-pentanone	ND	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
tert-Butylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1,1,2-Tetrachloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1,2,2-Tetrachloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Tetrachloroethene (PCE)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
trans-1,2-DCE	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
trans-1,3-Dichloropropene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2,3-Trichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2,4-Trichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1,1-Trichloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1,2-Trichloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Trichloroethene (TCE)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Trichlorofluoromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (1.5-2')
Project: SWMU No.14
Collection Date: 10/9/2012 4:55:00 PM
Lab ID: 1210583-002
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Vinyl chloride	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%REC	1	10/11/2012 8:17:30 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	1	10/11/2012 8:17:30 PM
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	10/11/2012 8:17:30 PM
Surr: Toluene-d8	99.0	70-130		%REC	1	10/11/2012 8:17:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (4-6')
Project: SWMU No.14
Collection Date: 10/9/2012 5:20:00 PM
Lab ID: 1210583-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/12/2012 8:39:34 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/12/2012 8:39:34 AM
Surr: DNOP	96.9	77.6-140		%REC	1	10/12/2012 8:39:34 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 3:37:27 AM
Surr: BFB	107	84-116		%REC	1	10/13/2012 3:37:27 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:30:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 8:26:10 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 12:16:23 PM
Barium	170	0.50		mg/Kg	5	10/17/2012 2:39:25 PM
Beryllium	0.89	0.30		mg/Kg	2	10/17/2012 12:16:23 PM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 12:16:23 PM
Chromium	7.6	0.60		mg/Kg	2	10/17/2012 12:16:23 PM
Cobalt	4.3	0.60		mg/Kg	2	10/17/2012 12:16:23 PM
Iron	13000	500		mg/Kg	500	10/17/2012 2:44:12 PM
Lead	4.0	0.50		mg/Kg	2	10/17/2012 12:16:23 PM
Manganese	370	1.0		mg/Kg	10	10/17/2012 2:41:49 PM
Nickel	7.2	1.0		mg/Kg	2	10/17/2012 12:16:23 PM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 8:26:10 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 12:16:23 PM
Vanadium	13	5.0		mg/Kg	2	10/17/2012 12:16:23 PM
Zinc	13	5.0		mg/Kg	2	10/17/2012 12:16:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (4-6')
Project: SWMU No.14
Collection Date: 10/9/2012 5:20:00 PM
Lab ID: 1210583-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 11:44:43 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 11:44:43 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 11:44:43 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 11:44:43 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 11:44:43 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 11:44:43 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (4-6')
Project: SWMU No.14
Collection Date: 10/9/2012 5:20:00 PM
Lab ID: 1210583-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 11:44:43 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 11:44:43 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 11:44:43 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Surr: 2,4,6-Tribromophenol	77.8	21.3-145		%REC	1	10/12/2012 11:44:43 PM
Surr: 2-Fluorobiphenyl	73.9	20-131		%REC	1	10/12/2012 11:44:43 PM
Surr: 2-Fluorophenol	62.1	11.9-130		%REC	1	10/12/2012 11:44:43 PM
Surr: 4-Terphenyl-d14	64.9	25.1-149		%REC	1	10/12/2012 11:44:43 PM
Surr: Nitrobenzene-d5	71.5	25.6-137		%REC	1	10/12/2012 11:44:43 PM
Surr: Phenol-d5	70.3	20.3-132		%REC	1	10/12/2012 11:44:43 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00190	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Toluene	0.00162	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Ethylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Xylenes, Total	ND	0.00200		mg/Kg	1	10/11/2012 8:48:22 PM
Methyl tert-butyl ether (MTBE)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2,4-Trimethylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,3,5-Trimethylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dichloroethane (EDC)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dibromoethane (EDB)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Naphthalene	ND	0.00200		mg/Kg	1	10/11/2012 8:48:22 PM
1-Methylnaphthalene	ND	0.00401		mg/Kg	1	10/11/2012 8:48:22 PM
2-Methylnaphthalene	ND	0.00401		mg/Kg	1	10/11/2012 8:48:22 PM
Acetone	0.0151	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
Bromobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Bromodichloromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Bromoform	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Bromomethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
2-Butanone	ND	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
Carbon tetrachloride	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Chlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Chloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (4-6')
Project: SWMU No.14
Collection Date: 10/9/2012 5:20:00 PM
Lab ID: 1210583-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Chloromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
2-Chlorotoluene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Carbon disulfide	ND	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
4-Chlorotoluene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
cis-1,2-DCE	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
cis-1,3-Dichloropropene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dibromo-3-chloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Dibromochloromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Dibromomethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,3-Dichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,4-Dichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Dichlorodifluoromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1-Dichloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1-Dichloroethene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dichloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,3-Dichloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
2,2-Dichloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1-Dichloropropene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Hexachlorobutadiene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Isopropylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
4-Isopropyltoluene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Methylene chloride	ND	0.00301		mg/Kg	1	10/11/2012 8:48:22 PM
n-Butylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
2-Hexanone	ND	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
n-Propylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
sec-Butylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Styrene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
4-Methyl-2-pentanone	ND	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
tert-Butylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1,1,2-Tetrachloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1,2,2-Tetrachloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Tetrachloroethene (PCE)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
trans-1,2-DCE	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
trans-1,3-Dichloropropene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2,3-Trichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2,4-Trichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1,1-Trichloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1,2-Trichloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Trichloroethene (TCE)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Trichlorofluoromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: SWMU 14-22 (4-6')
Project: SWMU No.14
Collection Date: 10/9/2012 5:20:00 PM
Lab ID: 1210583-003
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Vinyl chloride	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	10/11/2012 8:48:22 PM
Surr: 4-Bromofluorobenzene	90.0	70-130		%REC	1	10/11/2012 8:48:22 PM
Surr: Dibromofluoromethane	87.8	70-130		%REC	1	10/11/2012 8:48:22 PM
Surr: Toluene-d8	99.0	70-130		%REC	1	10/11/2012 8:48:22 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

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Project: SWMU No.14
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Lab ID: 1210583-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/12/2012 9:04:32 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/12/2012 9:04:32 AM
Surr: DNOP	96.1	77.6-140		%REC	1	10/12/2012 9:04:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 4:06:18 AM
Surr: BFB	105	84-116		%REC	1	10/13/2012 4:06:18 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:31:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 8:28:35 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 12:21:23 PM
Barium	170	0.50		mg/Kg	5	10/17/2012 2:46:48 PM
Beryllium	0.84	0.30		mg/Kg	2	10/17/2012 12:21:23 PM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 12:21:23 PM
Chromium	6.8	0.60		mg/Kg	2	10/17/2012 12:21:23 PM
Cobalt	3.9	0.60		mg/Kg	2	10/17/2012 12:21:23 PM
Iron	12000	500		mg/Kg	500	10/17/2012 2:49:14 PM
Lead	4.2	0.50		mg/Kg	2	10/17/2012 12:21:23 PM
Manganese	230	0.50		mg/Kg	5	10/17/2012 2:46:48 PM
Nickel	6.5	1.0		mg/Kg	2	10/17/2012 12:21:23 PM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 8:28:35 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 12:21:23 PM
Vanadium	12	5.0		mg/Kg	2	10/17/2012 12:21:23 PM
Zinc	12	5.0		mg/Kg	2	10/17/2012 12:21:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Aniline	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Azobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (4-6') DUP
Project: SWMU No.14
Collection Date: 10/9/2012 5:20:00 PM
Lab ID: 1210583-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Carbazole	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/13/2012 12:13:42 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Chrysene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/13/2012 12:13:42 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/13/2012 12:13:42 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/13/2012 12:13:42 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/13/2012 12:13:42 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/13/2012 12:13:42 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Fluorene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Isophorone	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Naphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (4-6') DUP
Project: SWMU No.14
Collection Date: 10/9/2012 5:20:00 PM
Lab ID: 1210583-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/13/2012 12:13:42 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/13/2012 12:13:42 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/13/2012 12:13:42 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Phenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Pyridine	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Surr: 2,4,6-Tribromophenol	79.0	21.3-145		%REC	1	10/13/2012 12:13:42 AM
Surr: 2-Fluorobiphenyl	80.0	20-131		%REC	1	10/13/2012 12:13:42 AM
Surr: 2-Fluorophenol	66.4	11.9-130		%REC	1	10/13/2012 12:13:42 AM
Surr: 4-Terphenyl-d14	66.3	25.1-149		%REC	1	10/13/2012 12:13:42 AM
Surr: Nitrobenzene-d5	81.2	25.6-137		%REC	1	10/13/2012 12:13:42 AM
Surr: Phenol-d5	79.3	20.3-132		%REC	1	10/13/2012 12:13:42 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00171	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Toluene	0.00120	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Ethylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Xylenes, Total	ND	0.00184		mg/Kg	1	10/11/2012 9:19:09 PM
Methyl tert-butyl ether (MTBE)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2,4-Trimethylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,3,5-Trimethylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dichloroethane (EDC)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dibromoethane (EDB)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Naphthalene	ND	0.00184		mg/Kg	1	10/11/2012 9:19:09 PM
1-Methylnaphthalene	ND	0.00369		mg/Kg	1	10/11/2012 9:19:09 PM
2-Methylnaphthalene	ND	0.00369		mg/Kg	1	10/11/2012 9:19:09 PM
Acetone	0.0149	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
Bromobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Bromodichloromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Bromoform	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Bromomethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
2-Butanone	ND	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
Carbon tetrachloride	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Chlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Chloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM

Qualifiers:

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Client Sample ID: SWMU 14-22 (4-6') DUP
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Lab ID: 1210583-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Chloromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
2-Chlorotoluene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Carbon disulfide	ND	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
4-Chlorotoluene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
cis-1,2-DCE	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
cis-1,3-Dichloropropene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dibromo-3-chloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Dibromochloromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Dibromomethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,3-Dichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,4-Dichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Dichlorodifluoromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1-Dichloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1-Dichloroethene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dichloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,3-Dichloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
2,2-Dichloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1-Dichloropropene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Hexachlorobutadiene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Isopropylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
4-Isopropyltoluene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Methylene chloride	ND	0.00277		mg/Kg	1	10/11/2012 9:19:09 PM
n-Butylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
2-Hexanone	ND	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
n-Propylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
sec-Butylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Styrene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
4-Methyl-2-pentanone	ND	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
tert-Butylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1,1,2-Tetrachloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1,2,2-Tetrachloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Tetrachloroethene (PCE)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
trans-1,2-DCE	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
trans-1,3-Dichloropropene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2,3-Trichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2,4-Trichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1,1-Trichloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1,2-Trichloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Trichloroethene (TCE)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Trichlorofluoromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (4-6') DUP
Project: SWMU No.14
Collection Date: 10/9/2012 5:20:00 PM
Lab ID: 1210583-004
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Vinyl chloride	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	1	10/11/2012 9:19:09 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	1	10/11/2012 9:19:09 PM
Surr: Dibromofluoromethane	94.8	70-130		%REC	1	10/11/2012 9:19:09 PM
Surr: Toluene-d8	87.1	70-130		%REC	1	10/11/2012 9:19:09 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (8-10')
Project: SWMU No.14
Collection Date: 10/9/2012 5:30:00 PM
Lab ID: 1210583-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/12/2012 10:15:10 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/12/2012 10:15:10 AM
Surr: DNOP	105	77.6-140		%REC	1	10/12/2012 10:15:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 4:35:03 AM
Surr: BFB	104	84-116		%REC	1	10/13/2012 4:35:03 AM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:33:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/23/2012 8:30:59 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 12:28:03 PM
Barium	250	1.0		mg/Kg	10	10/17/2012 2:51:50 PM
Beryllium	0.80	0.30		mg/Kg	2	10/17/2012 12:28:03 PM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 12:28:03 PM
Chromium	9.3	0.60		mg/Kg	2	10/17/2012 12:28:03 PM
Cobalt	3.8	0.60		mg/Kg	2	10/17/2012 12:28:03 PM
Iron	13000	500		mg/Kg	500	10/17/2012 2:54:18 PM
Lead	3.9	0.50		mg/Kg	2	10/17/2012 12:28:03 PM
Manganese	270	1.0		mg/Kg	10	10/17/2012 2:51:50 PM
Nickel	7.4	1.0		mg/Kg	2	10/17/2012 12:28:03 PM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 8:30:59 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 12:28:03 PM
Vanadium	13	5.0		mg/Kg	2	10/17/2012 12:28:03 PM
Zinc	14	5.0		mg/Kg	2	10/17/2012 12:28:03 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Aniline	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Azobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (8-10')
Project: SWMU No.14
Collection Date: 10/9/2012 5:30:00 PM
Lab ID: 1210583-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Carbazole	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/13/2012 12:42:33 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Chrysene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/13/2012 12:42:33 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/13/2012 12:42:33 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/13/2012 12:42:33 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/13/2012 12:42:33 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/13/2012 12:42:33 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Fluorene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Isophorone	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Naphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (8-10')
Project: SWMU No.14
Collection Date: 10/9/2012 5:30:00 PM
Lab ID: 1210583-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/13/2012 12:42:33 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/13/2012 12:42:33 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/13/2012 12:42:33 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Phenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Pyridine	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Surr: 2,4,6-Tribromophenol	70.9	21.3-145		%REC	1	10/13/2012 12:42:33 AM
Surr: 2-Fluorobiphenyl	69.8	20-131		%REC	1	10/13/2012 12:42:33 AM
Surr: 2-Fluorophenol	69.4	11.9-130		%REC	1	10/13/2012 12:42:33 AM
Surr: 4-Terphenyl-d14	58.7	25.1-149		%REC	1	10/13/2012 12:42:33 AM
Surr: Nitrobenzene-d5	75.0	25.6-137		%REC	1	10/13/2012 12:42:33 AM
Surr: Phenol-d5	76.1	20.3-132		%REC	1	10/13/2012 12:42:33 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00171	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Toluene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Ethylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Xylenes, Total	ND	0.00224		mg/Kg	1	10/11/2012 9:49:58 PM
Methyl tert-butyl ether (MTBE)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2,4-Trimethylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,3,5-Trimethylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dichloroethane (EDC)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dibromoethane (EDB)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Naphthalene	ND	0.00224		mg/Kg	1	10/11/2012 9:49:58 PM
1-Methylnaphthalene	ND	0.00448		mg/Kg	1	10/11/2012 9:49:58 PM
2-Methylnaphthalene	ND	0.00448		mg/Kg	1	10/11/2012 9:49:58 PM
Acetone	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
Bromobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Bromodichloromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Bromoform	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Bromomethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
2-Butanone	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
Carbon tetrachloride	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Chlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Chloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (8-10')
Project: SWMU No.14
Collection Date: 10/9/2012 5:30:00 PM
Lab ID: 1210583-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Chloromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
2-Chlorotoluene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Carbon disulfide	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
4-Chlorotoluene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
cis-1,2-DCE	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
cis-1,3-Dichloropropene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dibromo-3-chloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Dibromochloromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Dibromomethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,3-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,4-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Dichlorodifluoromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1-Dichloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1-Dichloroethene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dichloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,3-Dichloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
2,2-Dichloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1-Dichloropropene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Hexachlorobutadiene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Isopropylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
4-Isopropyltoluene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Methylene chloride	ND	0.00336		mg/Kg	1	10/11/2012 9:49:58 PM
n-Butylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
2-Hexanone	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
n-Propylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
sec-Butylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Styrene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
4-Methyl-2-pentanone	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
tert-Butylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1,1,2-Tetrachloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1,2,2-Tetrachloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Tetrachloroethene (PCE)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
trans-1,2-DCE	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
trans-1,3-Dichloropropene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2,3-Trichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2,4-Trichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1,1-Trichloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1,2-Trichloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Trichloroethene (TCE)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Trichlorofluoromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-22 (8-10')
Project: SWMU No.14
Collection Date: 10/9/2012 5:30:00 PM
Lab ID: 1210583-005
Matrix: SOIL
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Vinyl chloride	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	10/11/2012 9:49:58 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%REC	1	10/11/2012 9:49:58 PM
Surr: Dibromofluoromethane	98.4	70-130		%REC	1	10/11/2012 9:49:58 PM
Surr: Toluene-d8	95.5	70-130		%REC	1	10/11/2012 9:49:58 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121012038
Project Name: 1210583

Analytical Results Report

Sample Number 121012038-001 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:16 P
Client Sample ID 1210583-001D / SWMU 14-22 (0-0.5) **Sampling Time** 4:45 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	2.4	Percent		10/24/2012	CRW	%moisture	

Sample Number 121012038-002 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:16 P
Client Sample ID 1210583-002D / SWMU 14-22 (1.5-2) **Sampling Time** 4:55 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	9.2	Percent		10/24/2012	CRW	%moisture	

Sample Number 121012038-003 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:16 P
Client Sample ID 1210583-003D / SWMU 14-22 (4-6) **Sampling Time** 5:20 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	18.3	Percent		10/24/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121012038
Project Name: 1210583

Analytical Results Report

Sample Number 121012038-004 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:16 P
Client Sample ID 1210583-004D / SWMU 14-22 (4-6) DUP **Sampling Time** 5:20 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	17.3	Percent		10/24/2012	CRW	%moisture	

Sample Number 121012038-005 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:16 P
Client Sample ID 1210583-005D / SWMU 14-22 (8-10) **Sampling Time** 5:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	20.8	Percent		10/24/2012	CRW	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **MB-4254** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4254** RunNo: **6180**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178120** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID **LCS-4254** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4254** RunNo: **6180**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178205** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.4	52.6	130			
Surr: DNOP	4.4		5.000		88.5	77.6	140			

Sample ID **1210582-001CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4254** RunNo: **6180**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178471** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.9	49.60	0	115	57.2	146			
Surr: DNOP	3.3		4.960		65.9	77.6	140			S

Sample ID **1210582-001CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4254** RunNo: **6180**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178474** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.9	49.26	0	123	57.2	146	6.62	24.5	
Surr: DNOP	3.5		4.926		71.7	77.6	140	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178737** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	84	116			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178738** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID **1210582-004BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178751** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.2	5.0	18.26	0	39.3	70	130			S
Surr: BFB	780		730.5		107	84	116			

Sample ID **1210582-004BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178752** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	18.26	0	87.4	70	130	76.0	22.1	R
Surr: BFB	800		730.5		109	84	116	0	0	

Sample ID **B27** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178761** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	84	116			

Sample ID **2.5UG GRO LCS-II** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/13/2012** SeqNo: **178762** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	74	117			
Surr: BFB	1100		1000		112	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **1210653-005BMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178768** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	70	130			
Surr: BFB	1100		1000		113	84	116			

Sample ID **1210653-005BMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6205** RunNo: **6205**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178769** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	70	130	7.96	22.1	
Surr: BFB	1200		1000		117	84	116	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **mb-4251**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4251**	RunNo: **6184**			
Prep Date: **10/11/2012**	Analysis Date: **10/11/2012**	SeqNo: **178168**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **mb-4251** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4251** RunNo: **6184**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **178168** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.4		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	44.5		50.00		89.0	70	130			
Surr: Dibromofluoromethane	45.4		50.00		90.9	70	130			
Surr: Toluene-d8	43.9		50.00		87.8	70	130			

Sample ID **lcs-4251** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4251** RunNo: **6184**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **180403** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9.63	1.00	10.00	0	96.3	60	140			
Toluene	9.93	1.00	10.00	0	99.3	60	140			
Chlorobenzene	10.3	1.00	10.00	0	103	60	140			
1,1-Dichloroethene	11.1	1.00	10.00	0	111	60	140			
Trichloroethene (TCE)	8.17	1.00	10.00	0	81.7	60	140			
Surr: 1,2-Dichloroethane-d4	45.2		50.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID	**lcs-4251**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4251**	RunNo:	**6184**
Prep Date:	**10/11/2012**	Analysis Date:	**10/11/2012**	SeqNo:	**180403** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.8		50.00		93.5	70	130			
Surr: Toluene-d8	49.1		50.00		98.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **mb-4255**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4255**	RunNo: **6206**			
Prep Date: **10/11/2012**	Analysis Date: **10/12/2012**	SeqNo: **178793**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **mb-4255** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178793** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		96.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		90.7	20	131			
Surr: 2-Fluorophenol	3.0		3.330		91.3	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		76.4	25.1	149			
Surr: Nitrobenzene-d5	1.6		1.670		93.7	25.6	137			
Surr: Phenol-d5	3.1		3.330		94.4	20.3	132			

Sample ID **lcs-4255** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178794** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **lcs-4255** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178794** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	73.9	49.7	98.1			
4-Chloro-3-methylphenol	2.7	0.50	3.330	0	80.8	43.8	89.1			
2-Chlorophenol	2.2	0.20	3.330	0	67.4	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	67.6	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.6	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	81.4	39.1	86.9			
4-Nitrophenol	2.6	0.25	3.330	0	77.3	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.9	36.2	80			
Phenol	2.4	0.20	3.330	0	72.3	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	71.3	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.3		1.670		76.3	20	131			
Surr: 2-Fluorophenol	2.2		3.330		66.5	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		74.0	25.1	149			
Surr: Nitrobenzene-d5	1.3		1.670		77.6	25.6	137			
Surr: Phenol-d5	2.6		3.330		77.6	20.3	132			

Sample ID **1210582-001Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178807** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.91	0.40	1.667	0.1738	44.2	38.6	100			
4-Chloro-3-methylphenol	1.9	1.0	3.324	0	55.7	35.8	108			
2-Chlorophenol	1.7	0.40	3.324	0	51.8	48.2	96.1			
1,4-Dichlorobenzene	0.85	0.40	1.667	0	51.1	42.5	97.6			
2,4-Dinitrotoluene	ND	1.0	1.667	0	42.5	51.2	108			S
N-Nitrosodi-n-propylamine	1.0	0.40	1.667	0	61.2	31.6	114			
4-Nitrophenol	1.9	0.50	3.324	0	58.2	22.7	144			
Pentachlorophenol	1.5	0.80	3.324	0	46.2	24	109			
Phenol	1.8	0.40	3.324	0	54.0	33.1	108			
Pyrene	0.90	0.40	1.667	0	53.9	42.7	98.9			
1,2,4-Trichlorobenzene	0.85	0.40	1.667	0	50.7	27.1	118			
Surr: 2,4,6-Tribromophenol	2.0		3.324		59.6	21.3	145			
Surr: 2-Fluorobiphenyl	0.91		1.667		54.4	20	131			
Surr: 2-Fluorophenol	1.8		3.324		53.2	11.9	130			
Surr: 4-Terphenyl-d14	0.85		1.667		51.2	25.1	149			
Surr: Nitrobenzene-d5	0.89		1.667		53.3	25.6	137			
Surr: Phenol-d5	2.1		3.324		62.2	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **1210582-001Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4255** RunNo: **6206**
Prep Date: **10/11/2012** Analysis Date: **10/12/2012** SeqNo: **178808** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.76	0.40	1.660	0.1738	35.2	38.6	100	18.3	20	S
4-Chloro-3-methylphenol	1.6	0.99	3.310	0	47.7	35.8	108	15.8	20	
2-Chlorophenol	1.5	0.40	3.310	0	44.1	48.2	96.1	16.5	20	S
1,4-Dichlorobenzene	0.67	0.40	1.660	0	40.4	42.5	97.6	23.7	20	SR
2,4-Dinitrotoluene	ND	0.99	1.660	0	33.7	51.2	108	0	20	SR
N-Nitrosodi-n-propylamine	0.77	0.40	1.660	0	46.3	31.6	114	28.0	20	R
4-Nitrophenol	1.6	0.50	3.310	0	48.0	22.7	144	19.5	20	
Pentachlorophenol	1.3	0.80	3.310	0	38.4	24	109	19.0	20	
Phenol	1.4	0.40	3.310	0	43.3	33.1	108	22.5	20	R
Pyrene	0.74	0.40	1.660	0	44.7	42.7	98.9	19.0	20	
1,2,4-Trichlorobenzene	0.69	0.40	1.660	0	41.5	27.1	118	20.3	20	R
Surr: 2,4,6-Tribromophenol	1.6		3.310		48.8	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	0.72		1.660		43.6	20	131	0	0	
Surr: 2-Fluorophenol	1.5		3.310		44.6	11.9	130	0	0	
Surr: 4-Terphenyl-d14	0.68		1.660		41.2	25.1	149	0	0	
Surr: Nitrobenzene-d5	0.71		1.660		42.8	25.6	137	0	0	
Surr: Phenol-d5	1.6		3.310		47.6	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **MB-4317** SampType: **mblk** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180708** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4317** SampType: **lcs** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180709** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.7	80	120			

Sample ID **1210656-004CMS** SampType: **ms** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180735** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1654	0	96.4	75	125			

Sample ID **1210656-004CMSD** SampType: **msd** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180736** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1655	0	96.8	75	125	0.493	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **MB-4300** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4300** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181006** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4300** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4300** RunNo: **6281**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181012** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0.9150	90.4	80	120			
Arsenic	27	2.5	25.00	0	107	80	120			
Barium	25	0.10	25.00	0	101	80	120			
Beryllium	27	0.15	25.00	0	108	80	120			
Cadmium	26	0.10	25.00	0	104	80	120			
Chromium	25	0.30	25.00	0	100	80	120			
Cobalt	25	0.30	25.00	0	100	80	120			
Lead	26	0.25	25.00	0	103	80	120			
Manganese	25	0.10	25.00	0.05000	99.4	80	120			
Nickel	25	0.50	25.00	0	99.0	80	120			
Selenium	26	2.5	25.00	0	105	80	120			
Silver	5.2	0.25	5.000	0	104	80	120			
Vanadium	26	2.5	25.00	0	103	80	120			
Zinc	26	2.5	25.00	0	104	80	120			

Sample ID **MB-4300** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4300** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181592** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **LCS-4300** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4300** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181593** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	108	80	120			

Sample ID **1210583-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-22 (0-0.5')** Batch ID: **4300** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181667** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	25	0.75	24.84	0.8953	96.7	75	125			
Cadmium	22	0.50	24.84	0	90.2	75	125			
Chromium	31	1.5	24.84	12.41	74.0	75	125			S
Cobalt	26	1.5	24.84	5.546	80.5	75	125			
Lead	26	1.3	24.84	5.875	81.9	75	125			
Nickel	29	2.5	24.84	8.319	83.0	75	125			
Silver	4.6	1.3	4.967	0	92.2	75	125			
Vanadium	47	13	24.84	25.45	86.0	75	125			
Zinc	49	13	24.84	33.40	64.7	75	125			S

Sample ID **1210583-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-22 (0-0.5')** Batch ID: **4300** RunNo: **6310**
Prep Date: **10/15/2012** Analysis Date: **10/17/2012** SeqNo: **181668** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	26	0.75	24.89	0.8953	101	75	125	4.27	20	
Cadmium	23	0.50	24.89	0	94.2	75	125	4.55	20	
Chromium	33	1.5	24.89	12.41	83.0	75	125	7.15	20	
Cobalt	27	1.5	24.89	5.546	85.8	75	125	5.17	20	
Lead	28	1.2	24.89	5.875	87.0	75	125	4.93	20	
Nickel	30	2.5	24.89	8.319	88.6	75	125	4.90	20	
Silver	4.9	1.2	4.978	0	98.0	75	125	6.31	20	
Vanadium	48	12	24.89	25.45	91.4	75	125	2.90	20	
Zinc	58	12	24.89	33.40	98.3	75	125	15.6	20	

Sample ID **1210583-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-22 (0-0.5')** Batch ID: **4300** RunNo: **6437**
Prep Date: **10/15/2012** Analysis Date: **10/23/2012** SeqNo: **185157** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.84	0	30.6	75	125			S
Arsenic	25	12	24.84	0	102	75	125			
Selenium	13	12	24.84	0	53.6	75	125			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210583**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU No.14

Sample ID **1210583-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-22 (0-0.5')** Batch ID: **4300** RunNo: **6437**
Prep Date: **10/15/2012** Analysis Date: **10/23/2012** SeqNo: **185160** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.89	0	34.4	75	125	0	20	S
Arsenic	26	12	24.89	0	105	75	125	3.33	20	
Selenium	16	12	24.89	0	62.7	75	125	16.0	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210583

Received by/date: MG 10/11/12

Logged By: Michelle Garcia 10/11/2012 8:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 10/11/2012 8:42:39 AM Michelle Garcia

Reviewed By: 10/11/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210583	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/9/12	1645	SOIL	SWMU 14-22 (0-0.5)	2 VIALS	SOBI	-001										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1655		SWMU 14-22 (1.5-2')	2 VIALS	SOBI	-002										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1720		SWMU 14-22 (4-6')	2 VIALS	SOBI	-003										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1720		SWMU 14-22 (4-6') DUP	2 VIALS	SOBI	-004										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date Time
10/10/12	0735	[signature]	[signature]	10/11/12 0800
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210583	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/9/12	1730	SOIL	SWMU 14-22(8-10')	2 VIALS	SOBI	-005										X						
↓	↓	↓	↓	2 VIALS	MEOH											X						
↓	↓	↓	↓	3 JARS	—											X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/10/12	0735	[signature]	[signature]	10/11/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cn

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 30, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.14 OrderNo.: 1210585

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 2 sample(s) on 10/11/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1210585**
Date Reported: **10/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:00:00 PM
Lab ID: 1210585-001
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/11/2012 6:39:12 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/11/2012 6:39:12 PM
Surr: DNOP	113	79.5-166		%REC	1	10/11/2012 6:39:12 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	ND	0.10		mg/L	1	10/11/2012 12:06:42 PM
Chloride	ND	0.50		mg/L	1	10/11/2012 12:06:42 PM
Sulfate	ND	0.50		mg/L	1	10/11/2012 12:06:42 PM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	ND	0.0020		mg/L	1	10/12/2012 11:03:15 AM
Beryllium	ND	0.0020		mg/L	1	10/12/2012 11:03:15 AM
Cadmium	ND	0.0020		mg/L	1	10/12/2012 11:03:15 AM
Chromium	ND	0.0060		mg/L	1	10/12/2012 11:03:15 AM
Cobalt	ND	0.0060		mg/L	1	10/12/2012 11:03:15 AM
Iron	ND	0.020		mg/L	1	10/12/2012 11:03:15 AM
Manganese	ND	0.0020		mg/L	1	10/12/2012 11:03:15 AM
Nickel	ND	0.010		mg/L	1	10/12/2012 11:03:15 AM
Silver	ND	0.0050		mg/L	1	10/12/2012 11:03:15 AM
Vanadium	ND	0.050		mg/L	1	10/12/2012 11:03:15 AM
Zinc	ND	0.010		mg/L	1	10/12/2012 11:03:15 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/17/2012 12:43:57 PM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 12:43:57 PM
Lead	ND	0.0010		mg/L	1	10/17/2012 12:43:57 PM
Selenium	ND	0.0010		mg/L	1	10/17/2012 12:43:57 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/15/2012 6:58:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Acenaphthylene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Aniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Anthracene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Azobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benz(a)anthracene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzoic acid	ND	20		µg/L	1	10/14/2012 1:10:39 PM
Benzyl alcohol	ND	10		µg/L	1	10/14/2012 1:10:39 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:00:00 PM
Lab ID: 1210585-001
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Carbazole	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Chloroaniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Chlorophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Chrysene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Dibenzofuran	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Diethyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Dimethyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/14/2012 1:10:39 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/14/2012 1:10:39 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/14/2012 1:10:39 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Fluoranthene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Fluorene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Hexachlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Hexachloroethane	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Isophorone	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Methylphenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
3+4-Methylphenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/14/2012 1:10:39 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:00:00 PM
Lab ID: 1210585-001
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/14/2012 1:10:39 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Naphthalene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
3-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Nitrobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Nitrophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Nitrophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Pentachlorophenol	ND	20		µg/L	1	10/14/2012 1:10:39 PM
Phenanthrene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Phenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Pyrene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Pyridine	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Surr: 2,4,6-Tribromophenol	70.3	44.2-126		%REC	1	10/14/2012 1:10:39 PM
Surr: 2-Fluorobiphenyl	53.4	37-114		%REC	1	10/14/2012 1:10:39 PM
Surr: 2-Fluorophenol	46.2	23.4-98		%REC	1	10/14/2012 1:10:39 PM
Surr: 4-Terphenyl-d14	65.5	41.3-116		%REC	1	10/14/2012 1:10:39 PM
Surr: Nitrobenzene-d5	55.4	39.5-118		%REC	1	10/14/2012 1:10:39 PM
Surr: Phenol-d5	35.2	20.9-95.9		%REC	1	10/14/2012 1:10:39 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Toluene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Ethylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Naphthalene	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/11/2012 1:14:39 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/11/2012 1:14:39 PM
Acetone	ND	10		µg/L	1	10/11/2012 1:14:39 PM
Bromobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Bromoform	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Bromomethane	ND	3.0		µg/L	1	10/11/2012 1:14:39 PM
2-Butanone	ND	10		µg/L	1	10/11/2012 1:14:39 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:00:00 PM
Lab ID: 1210585-001
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	10		µg/L	1	10/11/2012 1:14:39 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Chlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Chloroethane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
Chloroform	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Chloromethane	ND	3.0		µg/L	1	10/11/2012 1:14:39 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Dibromomethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
2-Hexanone	ND	10		µg/L	1	10/11/2012 1:14:39 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/11/2012 1:14:39 PM
Methylene Chloride	ND	3.0		µg/L	1	10/11/2012 1:14:39 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/11/2012 1:14:39 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Styrene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:00:00 PM
Lab ID: 1210585-001
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
Vinyl chloride	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Xylenes, Total	ND	1.5		µg/L	1	10/11/2012 1:14:39 PM
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	1	10/11/2012 1:14:39 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	1	10/11/2012 1:14:39 PM
Surr: Dibromofluoromethane	92.5	70-130		%REC	1	10/11/2012 1:14:39 PM
Surr: Toluene-d8	92.0	70-130		%REC	1	10/11/2012 1:14:39 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/11/2012 1:14:39 PM
Surr: BFB	93.9	70-130		%REC	1	10/11/2012 1:14:39 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:15:00 PM
Lab ID: 1210585-002
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/11/2012 7:04:03 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/11/2012 7:04:03 PM
Surr: DNOP	115	79.5-166		%REC	1	10/11/2012 7:04:03 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Fluoride	ND	0.10		mg/L	1	10/11/2012 12:56:20 PM
Chloride	ND	0.50		mg/L	1	10/11/2012 12:56:20 PM
Sulfate	ND	0.50		mg/L	1	10/11/2012 12:56:20 PM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	ND	0.0020		mg/L	1	10/12/2012 11:15:11 AM
Beryllium	ND	0.0020		mg/L	1	10/12/2012 11:15:11 AM
Cadmium	ND	0.0020		mg/L	1	10/12/2012 11:15:11 AM
Chromium	ND	0.0060		mg/L	1	10/12/2012 11:15:11 AM
Cobalt	ND	0.0060		mg/L	1	10/12/2012 11:15:11 AM
Iron	ND	0.020		mg/L	1	10/12/2012 11:15:11 AM
Manganese	ND	0.0020		mg/L	1	10/12/2012 11:15:11 AM
Nickel	ND	0.010		mg/L	1	10/12/2012 11:15:11 AM
Silver	ND	0.0050		mg/L	1	10/12/2012 11:15:11 AM
Vanadium	ND	0.050		mg/L	1	10/12/2012 11:15:11 AM
Zinc	ND	0.010		mg/L	1	10/12/2012 11:15:11 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/17/2012 12:51:48 PM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 12:51:48 PM
Lead	ND	0.0010		mg/L	1	10/17/2012 12:51:48 PM
Selenium	ND	0.0010		mg/L	1	10/17/2012 12:51:48 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/15/2012 6:59:59 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Acenaphthylene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Aniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Anthracene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Azobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benz(a)anthracene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzoic acid	ND	20		µg/L	1	10/14/2012 1:40:00 PM
Benzyl alcohol	ND	10		µg/L	1	10/14/2012 1:40:00 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:15:00 PM
Lab ID: 1210585-002
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Carbazole	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Chloroaniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Chlorophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Chrysene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Dibenzofuran	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Diethyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Dimethyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/14/2012 1:40:00 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/14/2012 1:40:00 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/14/2012 1:40:00 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Fluoranthene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Fluorene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Hexachlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Hexachloroethane	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Isophorone	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Methylphenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
3+4-Methylphenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/14/2012 1:40:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:15:00 PM
Lab ID: 1210585-002
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/14/2012 1:40:00 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Naphthalene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
3-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Nitrobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Nitrophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Nitrophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Pentachlorophenol	ND	20		µg/L	1	10/14/2012 1:40:00 PM
Phenanthrene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Phenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Pyrene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Pyridine	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Surr: 2,4,6-Tribromophenol	74.3	44.2-126		%REC	1	10/14/2012 1:40:00 PM
Surr: 2-Fluorobiphenyl	55.0	37-114		%REC	1	10/14/2012 1:40:00 PM
Surr: 2-Fluorophenol	46.8	23.4-98		%REC	1	10/14/2012 1:40:00 PM
Surr: 4-Terphenyl-d14	64.6	41.3-116		%REC	1	10/14/2012 1:40:00 PM
Surr: Nitrobenzene-d5	56.5	39.5-118		%REC	1	10/14/2012 1:40:00 PM
Surr: Phenol-d5	35.1	20.9-95.9		%REC	1	10/14/2012 1:40:00 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Toluene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Ethylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Naphthalene	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/11/2012 3:06:43 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/11/2012 3:06:43 PM
Acetone	ND	10		µg/L	1	10/11/2012 3:06:43 PM
Bromobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Bromoform	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Bromomethane	ND	3.0		µg/L	1	10/11/2012 3:06:43 PM
2-Butanone	ND	10		µg/L	1	10/11/2012 3:06:43 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:15:00 PM
Lab ID: 1210585-002
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	10		µg/L	1	10/11/2012 3:06:43 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Chlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Chloroethane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
Chloroform	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Chloromethane	ND	3.0		µg/L	1	10/11/2012 3:06:43 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Dibromomethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
2-Hexanone	ND	10		µg/L	1	10/11/2012 3:06:43 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/11/2012 3:06:43 PM
Methylene Chloride	ND	3.0		µg/L	1	10/11/2012 3:06:43 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/11/2012 3:06:43 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Styrene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB100912
Project: SWMU NO.14
Collection Date: 10/9/2012 6:15:00 PM
Lab ID: 1210585-002
Matrix: AQUEOUS
Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
Vinyl chloride	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Xylenes, Total	ND	1.5		µg/L	1	10/11/2012 3:06:43 PM
Surr: 1,2-Dichloroethane-d4	93.0	70-130		%REC	1	10/11/2012 3:06:43 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	1	10/11/2012 3:06:43 PM
Surr: Dibromofluoromethane	90.6	70-130		%REC	1	10/11/2012 3:06:43 PM
Surr: Toluene-d8	93.5	70-130		%REC	1	10/11/2012 3:06:43 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/11/2012 3:06:43 PM
Surr: BFB	95.3	70-130		%REC	1	10/11/2012 3:06:43 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121012023
Project Name: 1210585

Analytical Results Report

Sample Number 121012023-001 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:10 PM
Client Sample ID 1210585-001E / EB100912 **Sampling Time** 6:00 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/22/2012	CRW	EPA 335.4	

Sample Number 121012023-002 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:10 PM
Client Sample ID 1210585-002E / FB100912 **Sampling Time** 6:15 PM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/22/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178907** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178908** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	101	85	115			
Beryllium	0.52	0.0020	0.5000	0	105	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Cobalt	0.49	0.0060	0.5000	0	98.2	85	115			
Iron	0.50	0.020	0.5000	0	99.7	85	115			
Manganese	0.49	0.0020	0.5000	0	98.8	85	115			
Nickel	0.48	0.010	0.5000	0	96.6	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.52	0.050	0.5000	0	105	85	115			
Zinc	0.51	0.010	0.5000	0	101	85	115			

Sample ID **1210368-001BMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178913** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	101	70	130			

Sample ID **1210368-001BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **R6212** RunNo: **6212**
Prep Date: Analysis Date: **10/12/2012** SeqNo: **178914** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	99.2	70	130	1.42	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210046-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181878** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.027	0.0010	0.02500	0.001891	99.5	70	130			

Sample ID **1210367-001BMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181885** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.6	70	130			
Arsenic	0.035	0.0010	0.02500	0.01018	101	70	130			
Selenium	0.031	0.0010	0.02500	0.005490	104	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181905** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.9	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181906** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.6	85	115			
Selenium	0.027	0.0010	0.02500	0	106	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181907** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.7	85	115			
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181909** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181910** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181911** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1210585-001CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **EB100912** Batch ID: **R6315** RunNo: **6315**
Prep Date: Analysis Date: **10/17/2012** SeqNo: **181948** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	70	130			
Arsenic	0.026	0.0010	0.02500	0	102	70	130			
Lead	0.025	0.0010	0.02500	0	99.7	70	130			
Selenium	0.026	0.0010	0.02500	0	105	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**MB-4303**	SampType:	**mblk**	TestCode:	**EPA Method 245.1: Mercury**				
Client ID:	**PBW**	Batch ID:	**4303**	RunNo:	**6268**				
Prep Date:	**10/15/2012**	Analysis Date:	**10/15/2012**	SeqNo:	**180618**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-4303**	SampType:	**lcs**	TestCode:	**EPA Method 245.1: Mercury**				
Client ID:	**LCSW**	Batch ID:	**4303**	RunNo:	**6268**				
Prep Date:	**10/15/2012**	Analysis Date:	**10/15/2012**	SeqNo:	**180619**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	95.8	80	120			

Sample ID	**1210352-007BMS**	SampType:	**ms**	TestCode:	**EPA Method 245.1: Mercury**				
Client ID:	**BatchQC**	Batch ID:	**4303**	RunNo:	**6268**				
Prep Date:	**10/15/2012**	Analysis Date:	**10/15/2012**	SeqNo:	**180639**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	93.6	75	125			

Sample ID	**1210352-007BMSD**	SampType:	**msd**	TestCode:	**EPA Method 245.1: Mercury**				
Client ID:	**BatchQC**	Batch ID:	**4303**	RunNo:	**6268**				
Prep Date:	**10/15/2012**	Analysis Date:	**10/15/2012**	SeqNo:	**180642**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	94.2	75	125	0.680	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6188** RunNo: **6188**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178268** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6188** RunNo: **6188**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178269** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	96.8	90	110			
Chloride	4.8	0.50	5.000	0	95.3	90	110			
Sulfate	9.5	0.50	10.00	0	95.4	90	110			

Sample ID **1210585-001FMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB100912** Batch ID: **R6188** RunNo: **6188**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178271** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	94.8	76.6	110			
Chloride	4.8	0.50	5.000	0.1379	92.7	87.8	111			
Sulfate	9.6	0.50	10.00	0	95.9	84.6	122			

Sample ID **1210585-001FMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB100912** Batch ID: **R6188** RunNo: **6188**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178272** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.8	76.6	110	3.16	20	
Chloride	4.8	0.50	5.000	0.1379	93.6	87.8	111	0.930	20	
Sulfate	9.6	0.50	10.00	0	96.4	84.6	122	0.537	20	

Sample ID **1210593-001AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6188** RunNo: **6188**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178283** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.4	0.10	0.5000	2.006	86.2	76.6	110			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**1210593-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 300.0: Anions**
Client ID:	**BatchQC**	Batch ID:	**R6188**	RunNo:	**6188**
Prep Date:		Analysis Date:	**10/11/2012**	SeqNo:	**178284** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.4	0.10	0.5000	2.006	86.2	76.6	110	0.00821	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4249** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **PBW** Batch ID: **4249** RunNo: **6146**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **177920** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		112	79.5	166			

Sample ID **LCS-4249** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSW** Batch ID: **4249** RunNo: **6146**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **177921** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.1	1.0	5.000	0	81.7	74	157			
Surr: DNOP	0.53		0.5000		105	79.5	166			

Sample ID **LCSD-4249** SampType: **LCSD** TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSS02** Batch ID: **4249** RunNo: **6146**
Prep Date: **10/11/2012** Analysis Date: **10/11/2012** SeqNo: **177922** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.7	1.0	5.000	0	74.3	74	157	9.49	23	
Surr: DNOP	0.50		0.5000		101	79.5	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6183**	RunNo: **6183**			
Prep Date:	Analysis Date: **10/11/2012**	SeqNo: **178201**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178201** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.5	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.9	70	130			
Surr: Toluene-d8	9.3		10.00		93.2	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178203** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	19	1.0	20.00	0	94.8	80	120			
Chlorobenzene	19	1.0	20.00	0	95.1	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.2	73.7	122			
Trichloroethene (TCE)	17	1.0	20.00	0	84.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178203** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.0		10.00		90.4	70	130			
Surr: Toluene-d8	9.4		10.00		93.9	70	130			

Sample ID **1210585-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EB100912** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178207** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	116	66.8	128			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	21	1.0	20.00	0	106	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	97.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.0	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.2		10.00		92.2	70	130			

Sample ID **1210585-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EB100912** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178208** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	66.8	128	8.48	16.7	
Toluene	21	1.0	20.00	0	107	70	130	2.10	18.7	
Chlorobenzene	22	1.0	20.00	0	108	70	130	2.28	19.5	
1,1-Dichloroethene	19	1.0	20.00	0	92.8	70	130	13.6	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	93.0	70	130	5.02	17.5	
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.7		10.00		96.6	70	130	0	0	
Surr: Dibromofluoromethane	9.1		10.00		90.9	70	130	0	0	
Surr: Toluene-d8	9.6		10.00		95.8	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4270**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4270**	RunNo: **6220**			
Prep Date: **10/12/2012**	Analysis Date: **10/14/2012**	SeqNo: **179276**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4270**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4270**	RunNo: **6220**			
Prep Date: **10/12/2012**	Analysis Date: **10/14/2012**	SeqNo: **179276**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	97		200.0		48.5	44.2	126			
Surr: 2-Fluorobiphenyl	48		100.0		47.8	37	114			
Surr: 2-Fluorophenol	68		200.0		34.0	23.4	98			
Surr: 4-Terphenyl-d14	60		100.0		60.1	41.3	116			
Surr: Nitrobenzene-d5	55		100.0		54.6	39.5	118			
Surr: Phenol-d5	67		200.0		33.3	20.9	95.9			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-4270** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **4270** RunNo: **6220**
Prep Date: **10/12/2012** Analysis Date: **10/14/2012** SeqNo: **179277** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.4	38.2	99.4			
4-Chloro-3-methylphenol	150	10	200.0	0	77.1	35.5	108			
2-Chlorophenol	130	10	200.0	0	63.2	29.8	106			
1,4-Dichlorobenzene	61	10	100.0	0	60.6	32.6	91.5			
2,4-Dinitrotoluene	92	10	100.0	0	92.1	44.7	112			
N-Nitrosodi-n-propylamine	80	10	100.0	0	80.1	38.5	105			
4-Nitrophenol	76	10	200.0	0	38.1	11.6	73.1			
Pentachlorophenol	88	20	200.0	0	43.8	20.2	93			
Phenol	78	10	200.0	0	39.1	23	66.1			
Pyrene	69	10	100.0	0	68.6	40.1	101			
1,2,4-Trichlorobenzene	67	10	100.0	0	67.4	37.7	99.1			
Surr: 2,4,6-Tribromophenol	140		200.0		70.2	44.2	126			
Surr: 2-Fluorobiphenyl	68		100.0		68.1	37	114			
Surr: 2-Fluorophenol	110		200.0		54.6	23.4	98			
Surr: 4-Terphenyl-d14	64		100.0		64.0	41.3	116			
Surr: Nitrobenzene-d5	72		100.0		72.0	39.5	118			
Surr: Phenol-d5	92		200.0		46.0	20.9	95.9			

Sample ID **lcsd-4270** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **4270** RunNo: **6220**
Prep Date: **10/12/2012** Analysis Date: **10/14/2012** SeqNo: **179278** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	67	10	100.0	0	66.9	38.2	99.4	2.22	20	
4-Chloro-3-methylphenol	150	10	200.0	0	77.0	35.5	108	0.0649	20	
2-Chlorophenol	120	10	200.0	0	62.0	29.8	106	1.92	20	
1,4-Dichlorobenzene	59	10	100.0	0	59.3	32.6	91.5	2.23	20	
2,4-Dinitrotoluene	88	10	100.0	0	88.4	44.7	112	4.01	20	
N-Nitrosodi-n-propylamine	77	10	100.0	0	77.0	38.5	105	3.95	20	
4-Nitrophenol	85	10	200.0	0	42.7	11.6	73.1	11.3	20	
Pentachlorophenol	100	20	200.0	0	50.9	20.2	93	14.8	20	
Phenol	81	10	200.0	0	40.5	23	66.1	3.54	20	
Pyrene	69	10	100.0	0	69.4	40.1	101	1.13	20	
1,2,4-Trichlorobenzene	61	10	100.0	0	60.7	37.7	99.1	10.4	20	
Surr: 2,4,6-Tribromophenol	160		200.0		81.7	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	70		100.0		69.5	37	114	0	0	
Surr: 2-Fluorophenol	110		200.0		56.4	23.4	98	0	0	
Surr: 4-Terphenyl-d14	66		100.0		65.6	41.3	116	0	0	
Surr: Nitrobenzene-d5	71		100.0		71.5	39.5	118	0	0	
Surr: Phenol-d5	90		200.0		45.1	20.9	95.9	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210585**
30-Oct-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml rb** SampType: **MBLK** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178164** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.8		10.00		98.5	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178166** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	90.8	85	115			
Surr: BFB	9.5		10.00		95.0	70	130			

Sample ID **1210585-002ams** SampType: **MS** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **FB100912** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178167** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	91.1	70	130			
Surr: BFB	9.5		10.00		95.2	70	130			

Sample ID **1210517-001AMSD** SampType: **MSD** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6183** RunNo: **6183**
Prep Date: Analysis Date: **10/11/2012** SeqNo: **178170** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1.2	0.050	0.5000	0.8288	81.9	70	130	5.02	20	
Surr: BFB	9.1		10.00		90.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210585

Received by/date: MG 10/11/12

Logged By: Michelle Garcia 10/11/2012 8:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 10/11/2012 9:00:09 AM Michelle Garcia

Reviewed By: 10/11/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 2 2 (<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210585	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/9/12	1800	WATER	EB100912	6 VOA	HCL & NEAT	-001										X						
				1 AMBER	NEAT												X					
				1 PLASTIC	NEAT														X			
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
	1815		FB100912	6 VOA	HCL & NEAT	-002										X						
				1 AMBER	NEAT												X					
				1 PLASTIC	NEAT														X			
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			

Date	Time	Relinquished by:	Received by:	Date	Time
10/10/12	0735	[signature]	[signature]	10/11/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cn

Ag

Cl
F
SO4

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 12, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.14 OrderNo.: 1210656

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 4 sample(s) on 10/12/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210656**
Date Reported: **11/12/2012**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:45:00 PM
Lab ID: 1210656-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	45	10		mg/Kg	1	10/15/2012 12:03:50 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/15/2012 12:03:50 PM
Surr: DNOP	84.6	77.6-140		%REC	1	10/15/2012 12:03:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 7:35:41 PM
Surr: BFB	88.6	84-116		%REC	1	10/19/2012 7:35:41 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	0.10	0.033		mg/kg	1	10/16/2012 5:59:00 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Barium	600	5.0		mg/Kg	50	10/25/2012 3:37:00 PM
Beryllium	0.61	0.30		mg/Kg	2	10/25/2012 3:06:37 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 3:06:37 PM
Chromium	9.6	0.60		mg/Kg	2	10/25/2012 3:06:37 PM
Cobalt	3.4	0.60		mg/Kg	2	10/25/2012 3:06:37 PM
Iron	13000	500		mg/Kg	500	10/25/2012 3:39:26 PM
Lead	4.2	0.50		mg/Kg	2	10/25/2012 3:06:37 PM
Manganese	720	5.0		mg/Kg	50	10/25/2012 3:37:00 PM
Nickel	5.9	1.0		mg/Kg	2	10/25/2012 3:06:37 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:41:44 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Zinc	140	12		mg/Kg	5	10/25/2012 3:21:25 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:45:00 PM
Lab ID: 1210656-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 9:34:14 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
3,3´-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 9:34:14 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 9:34:14 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:45:00 PM
Lab ID: 1210656-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 9:34:14 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Surr: 2,4,6-Tribromophenol	49.3	21.3-145		%REC	1	10/21/2012 9:34:14 AM
Surr: 2-Fluorobiphenyl	51.8	20-131		%REC	1	10/21/2012 9:34:14 AM
Surr: 2-Fluorophenol	50.6	11.9-130		%REC	1	10/21/2012 9:34:14 AM
Surr: 4-Terphenyl-d14	56.6	25.1-149		%REC	1	10/21/2012 9:34:14 AM
Surr: Nitrobenzene-d5	53.3	25.6-137		%REC	1	10/21/2012 9:34:14 AM
Surr: Phenol-d5	49.3	20.3-132		%REC	1	10/21/2012 9:34:14 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00261	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Toluene	0.00750	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Ethylbenzene	0.00207	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Xylenes, Total	0.0103	0.00216		mg/Kg	1	10/12/2012 4:21:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2,4-Trimethylbenzene	0.00512	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,3,5-Trimethylbenzene	0.00205	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dichloroethane (EDC)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dibromoethane (EDB)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Naphthalene	ND	0.00216		mg/Kg	1	10/12/2012 4:21:07 PM
1-Methylnaphthalene	ND	0.00431		mg/Kg	1	10/12/2012 4:21:07 PM
2-Methylnaphthalene	ND	0.00431		mg/Kg	1	10/12/2012 4:21:07 PM
Acetone	0.101	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
Bromobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Bromodichloromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Bromoform	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Bromomethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
2-Butanone	0.0188	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
Carbon tetrachloride	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Chlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Chloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:45:00 PM
Lab ID: 1210656-001
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Chloromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
2-Chlorotoluene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Carbon disulfide	ND	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
4-Chlorotoluene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
cis-1,2-DCE	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
cis-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dibromo-3-chloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Dibromochloromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Dibromomethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,3-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,4-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Dichlorodifluoromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1-Dichloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1-Dichloroethene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,3-Dichloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
2,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1-Dichloropropene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Hexachlorobutadiene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Isopropylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
4-Isopropyltoluene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Methylene chloride	ND	0.00323		mg/Kg	1	10/12/2012 4:21:07 PM
n-Butylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
2-Hexanone	ND	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
n-Propylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
sec-Butylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Styrene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
4-Methyl-2-pentanone	0.0142	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
tert-Butylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1,1,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1,2,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Tetrachloroethene (PCE)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
trans-1,2-DCE	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
trans-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2,3-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2,4-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1,1-Trichloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1,2-Trichloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Trichloroethene (TCE)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Trichlorofluoromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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CLIENT: Western Refining Southwest, Gallup
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Vinyl chloride	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	10/12/2012 4:21:07 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/12/2012 4:21:07 PM
Surr: Dibromofluoromethane	97.2	70-130		%REC	1	10/12/2012 4:21:07 PM
Surr: Toluene-d8	97.7	70-130		%REC	1	10/12/2012 4:21:07 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:55:00 PM
Lab ID: 1210656-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	32	9.9		mg/Kg	1	10/15/2012 3:29:18 PM
Motor Oil Range Organics (MRO)	75	49		mg/Kg	1	10/15/2012 3:29:18 PM
Surr: DNOP	95.2	77.6-140		%REC	1	10/15/2012 3:29:18 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 8:04:27 PM
Surr: BFB	87.9	84-116		%REC	1	10/19/2012 8:04:27 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 6:00:47 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Barium	460	2.0		mg/Kg	20	10/25/2012 8:25:06 PM
Beryllium	0.62	0.30		mg/Kg	2	10/25/2012 8:22:15 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:22:15 PM
Chromium	15	0.60		mg/Kg	2	10/25/2012 8:22:15 PM
Cobalt	3.7	0.60		mg/Kg	2	10/25/2012 8:22:15 PM
Iron	12000	500		mg/Kg	500	10/25/2012 8:27:45 PM
Lead	7.6	0.50		mg/Kg	2	10/25/2012 8:22:15 PM
Manganese	570	2.0		mg/Kg	20	10/25/2012 8:25:06 PM
Nickel	6.5	1.0		mg/Kg	2	10/25/2012 8:22:15 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:53:24 PM
Vanadium	16	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Zinc	41	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Acenaphthylene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Aniline	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Anthracene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Azobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benz(a)anthracene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzoic acid	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
Benzyl alcohol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:55:00 PM
Lab ID: 1210656-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Carbazole	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/21/2012 10:03:19 AM
2-Chlorophenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Chrysene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Dibenzofuran	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
3,3´-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/21/2012 10:03:19 AM
Diethyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Dimethyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/21/2012 10:03:19 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
Fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Fluorene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Hexachlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Hexachloroethane	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Isophorone	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2-Methylphenol	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
3+4-Methylphenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Naphthalene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2-Nitroaniline	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:55:00 PM
Lab ID: 1210656-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
Nitrobenzene	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
2-Nitrophenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/21/2012 10:03:19 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
Phenanthrene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Phenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Pyrene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Pyridine	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Surr: 2,4,6-Tribromophenol	100	21.3-145		%REC	1	10/21/2012 10:03:19 AM
Surr: 2-Fluorobiphenyl	105	20-131		%REC	1	10/21/2012 10:03:19 AM
Surr: 2-Fluorophenol	91.6	11.9-130		%REC	1	10/21/2012 10:03:19 AM
Surr: 4-Terphenyl-d14	117	25.1-149		%REC	1	10/21/2012 10:03:19 AM
Surr: Nitrobenzene-d5	112	25.6-137		%REC	1	10/21/2012 10:03:19 AM
Surr: Phenol-d5	102	20.3-132		%REC	1	10/21/2012 10:03:19 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00151	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Toluene	0.00235	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Ethylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Xylenes, Total	ND	0.00147		mg/Kg	1	10/12/2012 4:51:51 PM
Methyl tert-butyl ether (MTBE)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2,4-Trimethylbenzene	0.000894	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,3,5-Trimethylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dichloroethane (EDC)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dibromoethane (EDB)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Naphthalene	ND	0.00147		mg/Kg	1	10/12/2012 4:51:51 PM
1-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/12/2012 4:51:51 PM
2-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/12/2012 4:51:51 PM
Acetone	0.0383	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
Bromobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Bromodichloromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Bromoform	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Bromomethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
2-Butanone	ND	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
Carbon tetrachloride	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Chlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Chloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:55:00 PM
Lab ID: 1210656-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Chloromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
2-Chlorotoluene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Carbon disulfide	ND	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
4-Chlorotoluene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
cis-1,2-DCE	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
cis-1,3-Dichloropropene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dibromo-3-chloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Dibromochloromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Dibromomethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,3-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,4-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Dichlorodifluoromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1-Dichloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1-Dichloroethene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dichloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,3-Dichloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
2,2-Dichloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1-Dichloropropene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Hexachlorobutadiene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Isopropylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
4-Isopropyltoluene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Methylene chloride	ND	0.00220		mg/Kg	1	10/12/2012 4:51:51 PM
n-Butylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
2-Hexanone	ND	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
n-Propylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
sec-Butylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Styrene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
4-Methyl-2-pentanone	ND	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
tert-Butylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1,1,2-Tetrachloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1,2,2-Tetrachloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Tetrachloroethene (PCE)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
trans-1,2-DCE	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
trans-1,3-Dichloropropene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2,3-Trichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2,4-Trichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1,1-Trichloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1,2-Trichloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Trichloroethene (TCE)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Trichlorofluoromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/10/2012 1:55:00 PM
Lab ID: 1210656-002
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Vinyl chloride	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%REC	1	10/12/2012 4:51:51 PM
Surr: 4-Bromofluorobenzene	122	70-130		%REC	1	10/12/2012 4:51:51 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/12/2012 4:51:51 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	10/12/2012 4:51:51 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (12-14')
Project: SWMU NO.14
Collection Date: 10/10/2012 2:05:00 PM
Lab ID: 1210656-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	140	9.8		mg/Kg	1	10/13/2012 5:56:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/13/2012 5:56:28 PM
Surr: DNOP	96.6	77.6-140		%REC	1	10/13/2012 5:56:28 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	160	100		mg/Kg	20	10/20/2012 1:19:56 PM
Surr: BFB	130	84-116	S	%REC	20	10/20/2012 1:19:56 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 6:02:34 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Barium	220	2.0		mg/Kg	20	10/25/2012 8:48:33 PM
Beryllium	0.87	0.30		mg/Kg	2	10/25/2012 8:45:39 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:45:39 PM
Chromium	8.3	0.60		mg/Kg	2	10/25/2012 8:45:39 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 8:45:39 PM
Iron	13000	500		mg/Kg	500	10/25/2012 8:51:11 PM
Lead	3.7	0.50		mg/Kg	2	10/25/2012 8:45:39 PM
Manganese	300	2.0		mg/Kg	20	10/25/2012 8:48:33 PM
Nickel	7.2	1.0		mg/Kg	2	10/25/2012 8:45:39 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 3:08:43 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Zinc	13	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (12-14')
Project: SWMU NO.14
Collection Date: 10/10/2012 2:05:00 PM
Lab ID: 1210656-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 11:33:10 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 11:33:10 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 11:33:10 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Isophorone	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM

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Hall Environmental Analysis Laboratory, Inc.

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Matrix: SOIL
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 11:33:10 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Pyridine	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Surr: 2,4,6-Tribromophenol	104	21.3-145		%REC	1	10/20/2012 11:33:10 PM
Surr: 2-Fluorobiphenyl	104	20-131		%REC	1	10/20/2012 11:33:10 PM
Surr: 2-Fluorophenol	95.6	11.9-130		%REC	1	10/20/2012 11:33:10 PM
Surr: 4-Terphenyl-d14	89.8	25.1-149		%REC	1	10/20/2012 11:33:10 PM
Surr: Nitrobenzene-d5	102	25.6-137		%REC	1	10/20/2012 11:33:10 PM
Surr: Phenol-d5	102	20.3-132		%REC	1	10/20/2012 11:33:10 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	1.1	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Toluene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Ethylbenzene	3.8	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2,4-Trimethylbenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Naphthalene	1.3	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1-Methylnaphthalene	2.3	2.0		mg/Kg	10	10/23/2012 11:06:01 PM
2-Methylnaphthalene	3.5	2.0		mg/Kg	10	10/23/2012 11:06:01 PM
Acetone	ND	7.5		mg/Kg	10	10/23/2012 11:06:01 PM
Bromobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Bromoform	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Bromomethane	ND	1.5		mg/Kg	10	10/23/2012 11:06:01 PM
2-Butanone	ND	5.0		mg/Kg	10	10/23/2012 11:06:01 PM
Carbon disulfide	ND	5.0		mg/Kg	10	10/23/2012 11:06:01 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
Chlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Chloroethane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM

Qualifiers:

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (12-14')
Project: SWMU NO.14
Collection Date: 10/10/2012 2:05:00 PM
Lab ID: 1210656-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Chloromethane	ND	1.5		mg/Kg	10	10/23/2012 11:06:01 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Dibromomethane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
2-Hexanone	ND	5.0		mg/Kg	10	10/23/2012 11:06:01 PM
Isopropylbenzene	0.74	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/23/2012 11:06:01 PM
Methylene chloride	ND	1.5		mg/Kg	10	10/23/2012 11:06:01 PM
n-Butylbenzene	ND	1.5		mg/Kg	10	10/23/2012 11:06:01 PM
n-Propylbenzene	1.3	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
sec-Butylbenzene	0.51	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Styrene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (12-14')
Project: SWMU NO.14
Collection Date: 10/10/2012 2:05:00 PM
Lab ID: 1210656-003
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Xylenes, Total	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%REC	10	10/23/2012 11:06:01 PM
Surr: 4-Bromofluorobenzene	72.8	70-130		%REC	10	10/23/2012 11:06:01 PM
Surr: Dibromofluoromethane	98.6	70-130		%REC	10	10/23/2012 11:06:01 PM
Surr: Toluene-d8	94.5	70-130		%REC	10	10/23/2012 11:06:01 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (14-16')
Project: SWMU NO.14
Collection Date: 10/10/2012 2:15:00 PM
Lab ID: 1210656-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	19	9.9		mg/Kg	1	10/13/2012 6:21:33 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/13/2012 6:21:33 PM
Surr: DNOP	96.6	77.6-140		%REC	1	10/13/2012 6:21:33 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 11:25:35 PM
Surr: BFB	89.0	84-116		%REC	1	10/19/2012 11:25:35 PM
EPA METHOD 7471: MERCURY						Analyst: **IDC**
Mercury	ND	0.033		mg/kg	1	10/16/2012 6:04:29 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Barium	130	2.0		mg/Kg	20	10/25/2012 8:59:50 PM
Beryllium	0.75	0.30		mg/Kg	2	10/25/2012 8:56:59 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:56:59 PM
Chromium	7.8	0.60		mg/Kg	2	10/25/2012 8:56:59 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 8:56:59 PM
Iron	12000	500		mg/Kg	500	10/25/2012 9:02:34 PM
Lead	3.5	0.50		mg/Kg	2	10/25/2012 8:56:59 PM
Manganese	570	2.0		mg/Kg	20	10/25/2012 8:59:50 PM
Nickel	6.8	1.0		mg/Kg	2	10/25/2012 8:56:59 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 3:11:38 PM
Vanadium	15	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Zinc	12	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 12:02:25 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 12:02:25 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 12:02:25 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (14-16')
Project: SWMU NO.14
Collection Date: 10/10/2012 2:15:00 PM
Lab ID: 1210656-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 12:02:25 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Surr: 2,4,6-Tribromophenol	86.6	21.3-145		%REC	1	10/21/2012 12:02:25 AM
Surr: 2-Fluorobiphenyl	90.8	20-131		%REC	1	10/21/2012 12:02:25 AM
Surr: 2-Fluorophenol	80.7	11.9-130		%REC	1	10/21/2012 12:02:25 AM
Surr: 4-Terphenyl-d14	78.9	25.1-149		%REC	1	10/21/2012 12:02:25 AM
Surr: Nitrobenzene-d5	94.2	25.6-137		%REC	1	10/21/2012 12:02:25 AM
Surr: Phenol-d5	89.9	20.3-132		%REC	1	10/21/2012 12:02:25 AM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Toluene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Naphthalene	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/19/2012 9:15:47 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/19/2012 9:15:47 PM
Acetone	ND	0.75		mg/Kg	1	10/19/2012 9:15:47 PM
Bromobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Bromoform	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Bromomethane	ND	0.15		mg/Kg	1	10/19/2012 9:15:47 PM
2-Butanone	ND	0.50		mg/Kg	1	10/19/2012 9:15:47 PM
Carbon disulfide	ND	0.50		mg/Kg	1	10/19/2012 9:15:47 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
Chlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Chloroethane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (14-16')
Project: SWMU NO.14
Collection Date: 10/10/2012 2:15:00 PM
Lab ID: 1210656-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Chloromethane	ND	0.15		mg/Kg	1	10/19/2012 9:15:47 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Dibromomethane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
2-Hexanone	ND	0.50		mg/Kg	1	10/19/2012 9:15:47 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/19/2012 9:15:47 PM
Methylene chloride	ND	0.15		mg/Kg	1	10/19/2012 9:15:47 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/19/2012 9:15:47 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Styrene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-23 (14-16')
Project: SWMU NO.14
Collection Date: 10/10/2012 2:15:00 PM
Lab ID: 1210656-004
Matrix: SOIL
Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Vinyl chloride	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	10/19/2012 9:15:47 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	10/19/2012 9:15:47 PM
Surr: Dibromofluoromethane	91.4	70-130		%REC	1	10/19/2012 9:15:47 PM
Surr: Toluene-d8	99.6	70-130		%REC	1	10/19/2012 9:15:47 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017005
Project Name: 1210656

Analytical Results Report

Sample Number 121017005-001 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210656-001D / SWMU 14-23 (0-0.5) **Sampling Time** 1:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.364	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	2.1	Percent		10/26/2012	CRW	%moisture	

Sample Number 121017005-002 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210656-002D / SWMU 14-23 (1.5-2) **Sampling Time** 1:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	5.48	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	5.2	Percent		10/26/2012	CRW	%moisture	

Sample Number 121017005-003 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210656-003D / SWMU 14-23 (12-14) **Sampling Time** 2:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	19.9	Percent		10/26/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121017005
Project Name: 1210656

Analytical Results Report

Sample Number 121017005-004 **Sampling Date** 10/10/2012 **Date/Time Received** 10/16/2012 1:11 PM
Client Sample ID 1210656-004D / SWMU 14-23 (14-16) **Sampling Time** 2:15 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	15.8	Percent		10/26/2012	CRW	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4283** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4283** RunNo: **6213**
Prep Date: **10/12/2012** Analysis Date: **10/13/2012** SeqNo: **179030** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		91.2	77.6	140			

Sample ID **LCS-4283** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4283** RunNo: **6213**
Prep Date: **10/12/2012** Analysis Date: **10/13/2012** SeqNo: **179032** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.6	52.6	130			
Surr: DNOP	4.1		5.000		81.4	77.6	140			

Sample ID **1210653-001CMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4283** RunNo: **6226**
Prep Date: **10/12/2012** Analysis Date: **10/15/2012** SeqNo: **179425** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	10	51.18	103.8	-4.05	57.2	146			S
Surr: DNOP	3.9		5.118		75.7	77.6	140			S

Sample ID **1210653-001CMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4283** RunNo: **6226**
Prep Date: **10/12/2012** Analysis Date: **10/15/2012** SeqNo: **179426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	120	10	49.80	103.8	32.2	57.2	146	16.4	24.5	S
Surr: DNOP	4.2		4.980		84.5	77.6	140	0	0	

Sample ID **MB-4297** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4297** RunNo: **6226**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **179526** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.9	77.6	140			

Sample ID **LCS-4297** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4297** RunNo: **6226**
Prep Date: **10/15/2012** Analysis Date: **10/15/2012** SeqNo: **179527** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.5	77.6	140			

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4282** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4282** RunNo: **6371**
Prep Date: **10/12/2012** Analysis Date: **10/19/2012** SeqNo: **183155** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.4	84	116			

Sample ID **LCS-4282** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4282** RunNo: **6371**
Prep Date: **10/12/2012** Analysis Date: **10/19/2012** SeqNo: **183156** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.8	74	117			
Surr: BFB	960		1000		96.4	84	116			

Sample ID **1210668-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4282** RunNo: **6371**
Prep Date: **10/12/2012** Analysis Date: **10/19/2012** SeqNo: **183162** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	24	23.63	6.612	71.0	70	130			
Surr: BFB	4500		4726		96.1	84	116			

Sample ID **1210668-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4282** RunNo: **6371**
Prep Date: **10/12/2012** Analysis Date: **10/19/2012** SeqNo: **183163** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	24	23.61	6.612	65.0	70	130	0	22.1	S
Surr: BFB	4300		4721		90.4	84	116	0	0	

Sample ID **MB-4318** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4318** RunNo: **6373**
Prep Date: **10/15/2012** Analysis Date: **10/20/2012** SeqNo: **183238** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		89.4	84	116			

Sample ID **LCS-4318** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4318** RunNo: **6373**
Prep Date: **10/15/2012** Analysis Date: **10/20/2012** SeqNo: **183239** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.9	74	117			
Surr: BFB	940		1000		93.6	84	116			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210683-006AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4318** RunNo: **6373**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183246** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.98	0	88.0	70	130			
Surr: BFB	930		999.0		92.6	84	116			

Sample ID **1210683-006AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4318** RunNo: **6373**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183247** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.9	24.27	0	74.7	70	130	19.2	22.1	
Surr: BFB	910		970.9		93.3	84	116	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4282** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **4282** RunNo: **6255**
Prep Date: **10/12/2012** Analysis Date: **10/16/2012** SeqNo: **180339** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.6	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.8	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.8	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID **lcs-4282** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **4282** RunNo: **6255**
Prep Date: **10/12/2012** Analysis Date: **10/16/2012** SeqNo: **180340** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.2	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.6	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.6	70	130			
Surr: Toluene-d8	0.50		0.5000		99.8	70	130			

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184052** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R6394**	RunNo: **6394**	
Prep Date:	Analysis Date: **10/19/2012**	SeqNo: **184052**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184052** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.8	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID **100ng lcsc** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184056** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	114	70	130			
Toluene	1.0	0.050	1.000	0	102	80	120			
Chlorobenzene	1.0	0.050	1.000	0	100	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	108	74	124			
Trichloroethene (TCE)	0.95	0.050	1.000	0	94.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.6	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.1	70	130			
Surr: Toluene-d8	0.46		0.5000		91.1	70	130			

Sample ID **1210582-003bms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184057** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.0	0.50	5.641	0.9563	108	80.9	118			
Toluene	5.9	0.50	5.641	0.06927	104	69.5	119			
Chlorobenzene	5.8	0.50	5.641	0	104	75.7	115			
1,1-Dichloroethene	5.8	0.50	5.641	0	103	68.6	126			
Trichloroethene (TCE)	5.2	0.50	5.641	0	92.0	68.7	115			
Surr: 1,2-Dichloroethane-d4	2.7		2.820		95.2	70	130			
Surr: 4-Bromofluorobenzene	2.1		2.820		73.3	70	130			
Surr: Dibromofluoromethane	2.7		2.820		95.5	70	130			
Surr: Toluene-d8	2.7		2.820		95.6	70	130			

Sample ID **1210582-003bmsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184058** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210582-003bmsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184058** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.1	0.50	5.641	0.9563	109	80.9	118	0.812	20	
Toluene	5.7	0.50	5.641	0.06927	100	69.5	119	3.36	20	
Chlorobenzene	5.7	0.50	5.641	0	101	75.7	115	2.30	20	
1,1-Dichloroethene	5.6	0.50	5.641	0	99.4	68.6	126	3.18	24.8	
Trichloroethene (TCE)	5.2	0.50	5.641	0	91.9	68.7	115	0.0761	20	
Surr: 1,2-Dichloroethane-d4	2.8		2.820		98.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.820		69.9	70	130	0	0	S
Surr: Dibromofluoromethane	2.7		2.820		95.4	70	130	0	0	
Surr: Toluene-d8	2.6		2.820		93.2	70	130	0	0	

Sample ID **vcb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R6450** RunNo: **6450**
Prep Date: Analysis Date: **10/23/2012** SeqNo: **185560** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **vcb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBS**	Batch ID: **R6450**	RunNo: **6450**	
Prep Date:	Analysis Date: **10/23/2012**	SeqNo: **185560**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.5	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **vcb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **R6450** RunNo: **6450**
Prep Date: Analysis Date: **10/23/2012** SeqNo: **185560** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.46		0.5000		91.8	70	130			
Surr: Toluene-d8	0.46		0.5000		91.3	70	130			

Sample ID **1210734-012a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6450** RunNo: **6450**
Prep Date: Analysis Date: **10/23/2012** SeqNo: **185567** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.65	0.050	0.6367	0	102	80.9	118			
Toluene	0.68	0.050	0.6367	0	107	69.5	119			
Chlorobenzene	0.67	0.050	0.6367	0	105	75.7	115			
1,1-Dichloroethene	0.65	0.050	0.6367	0	103	68.6	126			
Trichloroethene (TCE)	0.62	0.050	0.6367	0	98.0	68.7	115			
Surr: 1,2-Dichloroethane-d4	0.29		0.3184		90.6	70	130			
Surr: 4-Bromofluorobenzene	0.30		0.3184		95.5	70	130			
Surr: Dibromofluoromethane	0.30		0.3184		92.8	70	130			
Surr: Toluene-d8	0.29		0.3184		92.3	70	130			

Sample ID **1210734-012a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R6450** RunNo: **6450**
Prep Date: Analysis Date: **10/23/2012** SeqNo: **185568** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.63	0.050	0.6367	0	99.1	80.9	118	3.10	20	
Toluene	0.69	0.050	0.6367	0	109	69.5	119	2.15	20	
Chlorobenzene	0.70	0.050	0.6367	0	110	75.7	115	4.30	20	
1,1-Dichloroethene	0.64	0.050	0.6367	0	101	68.6	126	1.95	24.8	
Trichloroethene (TCE)	0.60	0.050	0.6367	0	93.9	68.7	115	4.28	20	
Surr: 1,2-Dichloroethane-d4	0.28		0.3184		88.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.30		0.3184		94.4	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3184		94.1	70	130	0	0	
Surr: Toluene-d8	0.30		0.3184		93.2	70	130	0	0	

Sample ID **100ng icv** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R6450** RunNo: **6450**
Prep Date: Analysis Date: **10/23/2012** SeqNo: **185691** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	100	70	130			
Toluene	1.1	0.050	1.000	0	106	80	120			
Chlorobenzene	1.1	0.050	1.000	0	107	70	130			
1,1-Dichloroethene	1.2	0.050	1.000	0	118	74	124			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng icv** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **R6450** RunNo: **6450**
Prep Date: Analysis Date: **10/23/2012** SeqNo: **185691** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	0.99	0.050	1.000	0	99.3	70	130			
Surr: 1,2-Dichloroethane-d4	1.5		1.500		97.7	70	130			
Surr: 4-Bromofluorobenzene	1.6		1.500		106	70	130			
Surr: Dibromofluoromethane	1.5		1.500		98.4	70	130			
Surr: Toluene-d8	1.5		1.500		99.9	70	130			

Sample ID **mb-4362** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186696** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.1	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.5	70	130			
Surr: Toluene-d8	0.49		0.5000		98.5	70	130			

Sample ID **1210683-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **4282** RunNo: **6485**
Prep Date: **10/12/2012** Analysis Date: **10/24/2012** SeqNo: **186734** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.4897		93.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4897		94.5	70	130			
Surr: Dibromofluoromethane	0.45		0.4897		92.1	70	130			
Surr: Toluene-d8	0.47		0.4897		96.8	70	130			

Sample ID **1210683-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **4282** RunNo: **6485**
Prep Date: **10/12/2012** Analysis Date: **10/24/2012** SeqNo: **186735** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.4888		93.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.41		0.4888		83.7	70	130	0	0	
Surr: Dibromofluoromethane	0.47		0.4888		95.8	70	130	0	0	
Surr: Toluene-d8	0.44		0.4888		89.7	70	130	0	0	

Sample ID **lcs-4362** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **4362** RunNo: **6485**
Prep Date: **10/17/2012** Analysis Date: **10/24/2012** SeqNo: **186792** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**lcs-4362**	SampType:	**LCS**	TestCode:	**EPA Method 8260B: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4362**	RunNo:	**6485**
Prep Date:	**10/17/2012**	Analysis Date:	**10/24/2012**	SeqNo:	**186792** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.7	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.1	70	130			
Surr: Toluene-d8	0.47		0.5000		94.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4280**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4280**	RunNo: **6223**			
Prep Date: **10/12/2012**	Analysis Date: **10/12/2012**	SeqNo: **179318**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4280** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4280** RunNo: **6223**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **179318** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.9		50.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.3	70	130			
Surr: Dibromofluoromethane	49.4		50.00		98.8	70	130			
Surr: Toluene-d8	46.4		50.00		92.9	70	130			

Sample ID **lcs-4280** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4280** RunNo: **6223**
Prep Date: **10/12/2012** Analysis Date: **10/12/2012** SeqNo: **180404** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12.3	1.00	12.50	0	98.3	60	140			
Toluene	11.6	1.00	12.50	0	93.2	60	140			
Chlorobenzene	12.4	1.00	12.50	0	99.5	60	140			
1,1-Dichloroethene	13.9	1.00	12.50	0	111	60	140			
Trichloroethene (TCE)	10.5	1.00	12.50	0	84.3	60	140			
Surr: 1,2-Dichloroethane-d4	46.0		50.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**lcs-4280**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4280**	RunNo:	**6223**
Prep Date:	**10/12/2012**	Analysis Date:	**10/12/2012**	SeqNo:	**180404** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.9		50.00		93.9	70	130			
Surr: Toluene-d8	42.8		50.00		85.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4304**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4304**	RunNo: **6287**			
Prep Date: **10/15/2012**	Analysis Date: **10/16/2012**	SeqNo: **181172**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4304** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181172** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.3		3.330		99.2	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		87.3	20	131			
Surr: 2-Fluorophenol	2.9		3.330		86.6	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		77.7	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		86.0	25.6	137			
Surr: Phenol-d5	2.8		3.330		85.1	20.3	132			

Sample ID **lcs-4304** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181173** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-4304** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4304** RunNo: **6287**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **181173** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	0.20	1.670	0	87.0	49.7	98.1			
4-Chloro-3-methylphenol	2.8	0.50	3.330	0	83.9	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	70.1	41.1	96.9			
1,4-Dichlorobenzene	1.2	0.20	1.670	0	70.8	41	97.4			
2,4-Dinitrotoluene	1.8	0.50	1.670	0	107	44.4	104			S
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	84.8	39.1	86.9			
4-Nitrophenol	2.9	0.25	3.330	0	87.7	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.0	36.2	80			
Phenol	2.5	0.20	3.330	0	76.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	71.1	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	79.0	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		98.8	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		89.8	20	131			
Surr: 2-Fluorophenol	2.5		3.330		75.9	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		74.2	25.1	149			
Surr: Nitrobenzene-d5	1.5		1.670		90.6	25.6	137			
Surr: Phenol-d5	2.8		3.330		84.9	20.3	132			

Sample ID **mb-4337** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183352** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.2		3.330		95.0	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		88.8	20	131			
Surr: 2-Fluorophenol	2.5		3.330		75.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		76.8	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		84.4	25.6	137			
Surr: Phenol-d5	2.6		3.330		78.4	20.3	132			

Sample ID **lcs-4337** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183353** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		89.9	20	131			
Surr: 2-Fluorophenol	2.4		3.330		71.3	11.9	130			
Surr: 4-Terphenyl-d14	1.4		1.670		85.9	25.1	149			
Surr: Nitrobenzene-d5	1.6		1.670		93.1	25.6	137			
Surr: Phenol-d5	2.9		3.330		86.8	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210653-001CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4304** RunNo: **6376**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183387** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.40	1.664	0	74.7	25.6	142			
4-Chloro-3-methylphenol	2.6	1.0	3.318	0	78.7	63.7	100			
2-Chlorophenol	2.4	0.40	3.318	0	73.0	22.2	126			
1,4-Dichlorobenzene	1.1	0.40	1.664	0	69.0	12.4	115			
2,4-Dinitrotoluene	1.3	1.0	1.664	0	78.8	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.40	1.664	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.50	3.318	0	73.6	36.7	130			
Pentachlorophenol	2.2	0.80	3.318	0	66.4	15.8	113			
Phenol	2.5	0.40	3.318	0	73.9	25.1	124			
Pyrene	1.5	0.40	1.664	0	88.1	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.40	1.664	0	82.7	30	113			
Surr: 2,4,6-Tribromophenol	3.3		3.318		101	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.664		94.0	20	131			
Surr: 2-Fluorophenol	2.9		3.318		88.7	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.664		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.664		103	25.6	137			
Surr: Phenol-d5	3.2		3.318		97.8	20.3	132			

Sample ID **1210692-010CMS** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183388** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.3		3.350		97.8	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.680		94.5	20	131			
Surr: 2-Fluorophenol	2.7		3.350		79.9	11.9	130			
Surr: 4-Terphenyl-d14	1.4		1.680		83.3	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.680		104	25.6	137			
Surr: Phenol-d5	3.1		3.350		93.0	20.3	132			

Sample ID **1210653-001CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4304** RunNo: **6376**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183389** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.40	1.672	0	75.2	25.6	142	1.09	22	
4-Chloro-3-methylphenol	2.4	1.0	3.334	0	73.0	63.7	100	7.05	27.3	
2-Chlorophenol	2.3	0.40	3.334	0	67.8	22.2	126	6.86	26.3	
1,4-Dichlorobenzene	1.0	0.40	1.672	0	61.9	12.4	115	10.4	27.4	
2,4-Dinitrotoluene	1.3	1.0	1.672	0	77.2	14.9	142	1.50	27.4	
N-Nitrosodi-n-propylamine	1.3	0.40	1.672	0	75.4	13.9	136	7.14	22.6	
4-Nitrophenol	2.4	0.50	3.334	0	73.4	36.7	130	0.281	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210653-001CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4304** RunNo: **6376**
Prep Date: **10/15/2012** Analysis Date: **10/21/2012** SeqNo: **183389** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Pentachlorophenol	2.2	0.80	3.334	0	66.2	15.8	113	0.258	27.1	
Phenol	2.1	0.40	3.334	0	62.9	25.1	124	15.6	32.2	
Pyrene	1.3	0.40	1.672	0	79.2	35.8	124	10.1	29.5	
1,2,4-Trichlorobenzene	1.3	0.40	1.672	0	80.6	30	113	2.14	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.334		92.3	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.672		87.3	20	131	0	0	
Surr: 2-Fluorophenol	2.8		3.334		83.7	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.672		84.8	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.5		1.672		91.5	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.334		88.5	20.3	132	0	0	

Sample ID **1210692-010CMSD** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4337** RunNo: **6376**
Prep Date: **10/16/2012** Analysis Date: **10/21/2012** SeqNo: **183390** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.2		3.332		97.1	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.6		1.671		98.0	20	131	0	0	
Surr: 2-Fluorophenol	2.6		3.332		76.9	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.671		78.6	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.7		1.671		101	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.332		89.3	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4317** SampType: **mblk** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180708** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4317** SampType: **lcs** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180709** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.7	80	120			

Sample ID **1210656-004CMS** SampType: **ms** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 14-23 (14-16'** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180735** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1654	0	96.4	75	125			

Sample ID **1210656-004CMSD** SampType: **msd** TestCode: **EPA Method 7471: Mercury**
Client ID: **SWMU 14-23 (14-16'** Batch ID: **4317** RunNo: **6270**
Prep Date: **10/15/2012** Analysis Date: **10/16/2012** SeqNo: **180736** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1655	0	96.8	75	125	0.493	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4441** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186822** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4441** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186823** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	23	2.5	25.00	0	92.2	80	120			
Arsenic	23	2.5	25.00	0	93.7	80	120			
Barium	23	0.10	25.00	0	92.2	80	120			
Beryllium	24	0.15	25.00	0	95.1	80	120			
Cadmium	23	0.10	25.00	0	92.8	80	120			
Chromium	23	0.30	25.00	0	91.8	80	120			
Cobalt	22	0.30	25.00	0	88.9	80	120			
Iron	23	1.0	25.00	0	93.7	80	120			
Lead	23	0.25	25.00	0	91.3	80	120			
Manganese	23	0.10	25.00	0.04450	90.3	80	120			
Nickel	22	0.50	25.00	0	87.6	80	120			
Selenium	22	2.5	25.00	0	87.2	80	120			
Vanadium	24	2.5	25.00	0	95.4	80	120			
Zinc	23	2.5	25.00	0	90.7	80	120			

Sample ID **1210656-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-23 (0-0.5')** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.2	5.0	24.67	0	20.9	75	125			S
Arsenic	23	5.0	24.67	2.167	85.1	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210656-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-23 (0-0.5')** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	21	0.30	24.67	0.6108	83.1	75	125			
Cadmium	19	0.20	24.67	0	78.2	75	125			
Chromium	31	0.60	24.67	9.563	87.0	75	125			
Cobalt	21	0.60	24.67	3.401	71.6	75	125			S
Lead	22	0.50	24.67	4.192	72.5	75	125			S
Nickel	24	1.0	24.67	5.943	73.5	75	125			S
Selenium	11	5.0	24.67	0	43.9	75	125			S
Vanadium	41	5.0	24.67	17.94	92.0	75	125			

Sample ID **1210656-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-23 (0-0.5')** Batch ID: **4441** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	24.23	0	20.3	75	125	200	20	S
Arsenic	23	5.0	24.23	2.167	87.5	75	125	0.929	20	
Beryllium	21	0.30	24.23	0.6108	85.4	75	125	0.909	20	
Cadmium	20	0.20	24.23	0	82.3	75	125	3.30	20	
Chromium	30	0.60	24.23	9.563	83.1	75	125	4.37	20	
Cobalt	21	0.60	24.23	3.401	72.9	75	125	0.0820	20	S
Lead	21	0.50	24.23	4.192	70.5	75	125	3.76	20	S
Nickel	24	1.0	24.23	5.943	75.3	75	125	0.450	20	
Selenium	13	5.0	24.23	0	54.1	75	125	19.1	20	S
Vanadium	39	5.0	24.23	17.94	88.1	75	125	3.41	20	

Sample ID **MB-4441** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4441** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188994** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID **LCS-4441** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4441** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188995** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.3	0.25	5.000	0	106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210656**
12-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210656-001CMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-23 (0-0.5')** Batch ID: **4441** RunNo: **6598**
Prep Date: **10/22/2012** Analysis Date: **10/31/2012** SeqNo: **190745** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.935	0	86.1	75	125			

Sample ID **1210656-001CMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **SWMU 14-23 (0-0.5')** Batch ID: **4441** RunNo: **6598**
Prep Date: **10/22/2012** Analysis Date: **10/31/2012** SeqNo: **190746** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.847	0	87.1	75	125	0.553	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1210656**

Received by/date: MG 10/12/12

Logged By: **Michelle Garcia** 10/12/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/12/2012 9:27:38 AM Michelle Garcia

Reviewed By: IO 10/12/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐ # of preserved bottles checked for pH:
(Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ (<2 or >12 unless noted)
15. Is it clear what analyses were requested? Yes ☑ No ☐ Adjusted?
16. Were all holding times able to be met? Yes ☑ No ☐
(If no, notify customer for authorization.) Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW INC. GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7 GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH - RPS
Sampler: TRACY PAYNE - RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210656	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/10/12	1345	SOIL	SWMU 14-23(0-0.5)	2 VIALS	SOBI	-001										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1355		SWMU 14-23(1.5-2')	2 VIALS	SOBI	-002										X						
				2 VIALS	MeOH											X						
				3 JARS	—											X	X	X	X			
	1405		SWMU 14-23(12-14')	2 VIALS	MeOH	-003										X						
				3 JARS	—											X	X	X	X			
	1415		SWMU 14-23(14-16')	2 VIALS	SOBI	-004										X						
				2 VIALS	MeOH	per Tracy										X						
				3 JARS	—	10/11/12										X	X	X	X			

Date	Time	Relinquished by	Received by	Date	Time
10/11/12	0735	[signature]	Michelle Gonzales	10/12/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☑	A	Antimony	mg/Kg		0.629	0	
☑	A	Arsenic	mg/Kg		0.6263	0	
☑	A	Barium	mg/Kg		0.0609	0	
☑	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☑	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☑	A	Chromium	mg/Kg		0.1184	0	
☑	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☑	A	Iron	mg/Kg		0.7476	0	
☑	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☑	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☑	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☑	A	Selenium	mg/Kg		1.4025	0	
☑	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☑	A	Vanadium	mg/Kg		0.0565	0	
☑	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cn

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 15, 2012

Scott Crouch

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301
TEL:
FAX

RE: SWMU NO.14 OrderNo.: 1210860

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1210860**
Date Reported: **11/15/2012**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/17/2012 10:15:00 AM
Lab ID: 1210860-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 5:50:17 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/21/2012 5:50:17 AM
Surr: DNOP	100	77.6-140		%REC	1	10/21/2012 5:50:17 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/27/2012 1:44:37 PM
Surr: BFB	99.5	84-116		%REC	1	10/27/2012 1:44:37 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	11/1/2012 4:09:42 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
Barium	440	1.0		mg/Kg	10	10/25/2012 2:09:26 PM
Beryllium	0.80	0.30		mg/Kg	2	10/25/2012 12:21:41 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 12:21:41 PM
Chromium	10	0.60		mg/Kg	2	10/25/2012 12:21:41 PM
Cobalt	4.6	0.60		mg/Kg	2	10/25/2012 12:21:41 PM
Iron	15000	500		mg/Kg	500	11/2/2012 7:08:54 AM
Lead	2.5	0.50		mg/Kg	2	10/25/2012 12:21:41 PM
Manganese	450	1.0		mg/Kg	10	10/25/2012 2:09:26 PM
Nickel	8.0	1.0		mg/Kg	2	10/25/2012 12:21:41 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:23:58 PM
Vanadium	22	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
Zinc	25	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Aniline	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Azobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
Benzyl alcohol	0.32	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/17/2012 10:15:00 AM
Lab ID: 1210860-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Carbazole	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/24/2012 9:26:31 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Chrysene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/24/2012 9:26:31 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/24/2012 9:26:31 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Fluorene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Isophorone	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Naphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM

Qualifiers:

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/24/2012 9:26:31 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Phenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Pyridine	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Surr: 2,4,6-Tribromophenol	84.3	21.3-145		%REC	1	10/24/2012 9:26:31 PM
Surr: 2-Fluorobiphenyl	83.6	20-131		%REC	1	10/24/2012 9:26:31 PM
Surr: 2-Fluorophenol	76.1	11.9-130		%REC	1	10/24/2012 9:26:31 PM
Surr: 4-Terphenyl-d14	74.2	25.1-149		%REC	1	10/24/2012 9:26:31 PM
Surr: Nitrobenzene-d5	88.7	25.6-137		%REC	1	10/24/2012 9:26:31 PM
Surr: Phenol-d5	75.5	20.3-132		%REC	1	10/24/2012 9:26:31 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00213	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Toluene	0.00222	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Ethylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Xylenes, Total	0.00380	0.00160		mg/Kg	1	10/19/2012 1:07:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2,4-Trimethylbenzene	0.000935	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,3,5-Trimethylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dichloroethane (EDC)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dibromoethane (EDB)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Naphthalene	ND	0.00160		mg/Kg	1	10/19/2012 1:07:47 PM
1-Methylnaphthalene	ND	0.00320		mg/Kg	1	10/19/2012 1:07:47 PM
2-Methylnaphthalene	ND	0.00320		mg/Kg	1	10/19/2012 1:07:47 PM
Acetone	0.0480	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
Bromobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Bromodichloromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Bromoform	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Bromomethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
2-Butanone	0.00846	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
Carbon tetrachloride	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Chlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Chloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (0-0.5')
Project: SWMU NO.14
Collection Date: 10/17/2012 10:15:00 AM
Lab ID: 1210860-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Chloromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
2-Chlorotoluene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Carbon disulfide	ND	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
4-Chlorotoluene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
cis-1,2-DCE	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
cis-1,3-Dichloropropene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dibromo-3-chloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Dibromochloromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Dibromomethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,3-Dichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,4-Dichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Dichlorodifluoromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1-Dichloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1-Dichloroethene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dichloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,3-Dichloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
2,2-Dichloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1-Dichloropropene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Hexachlorobutadiene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Isopropylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
4-Isopropyltoluene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Methylene chloride	ND	0.00240		mg/Kg	1	10/19/2012 1:07:47 PM
n-Butylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
2-Hexanone	ND	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
n-Propylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
sec-Butylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Styrene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
4-Methyl-2-pentanone	ND	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
tert-Butylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1,1,2-Tetrachloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1,2,2-Tetrachloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Tetrachloroethene (PCE)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
trans-1,2-DCE	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
trans-1,3-Dichloropropene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2,3-Trichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2,4-Trichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1,1-Trichloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1,2-Trichloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Trichloroethene (TCE)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Trichlorofluoromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (0-0.5')
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Collection Date: 10/17/2012 10:15:00 AM
Lab ID: 1210860-001
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Vinyl chloride	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Surr: 1,2-Dichloroethane-d4	87.9	70-130		%REC	1	10/19/2012 1:07:47 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/19/2012 1:07:47 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/19/2012 1:07:47 PM
Surr: Toluene-d8	93.6	70-130		%REC	1	10/19/2012 1:07:47 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/17/2012 10:30:00 AM
Lab ID: 1210860-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/19/2012 1:24:09 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/19/2012 1:24:09 PM
Surr: DNOP	95.6	77.6-140		%REC	1	10/19/2012 1:24:09 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/27/2012 1:15:50 PM
Surr: BFB	96.3	84-116		%REC	1	10/27/2012 1:15:50 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	11/1/2012 4:11:28 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Antimony	ND	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
Barium	43	0.20		mg/Kg	2	10/25/2012 12:26:50 PM
Beryllium	0.83	0.30		mg/Kg	2	10/25/2012 12:26:50 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 12:26:50 PM
Chromium	7.8	0.60		mg/Kg	2	10/25/2012 12:26:50 PM
Cobalt	3.5	0.60		mg/Kg	2	10/25/2012 12:26:50 PM
Iron	16000	500		mg/Kg	500	11/2/2012 7:21:58 AM
Lead	3.3	0.50		mg/Kg	2	10/25/2012 12:26:50 PM
Manganese	230	1.0		mg/Kg	10	10/25/2012 2:14:32 PM
Nickel	6.4	1.0		mg/Kg	2	10/25/2012 12:26:50 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:26:49 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
Zinc	12	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Aniline	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Azobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/17/2012 10:30:00 AM
Lab ID: 1210860-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Carbazole	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/24/2012 9:56:18 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Chrysene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
3,3´-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/24/2012 9:56:18 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/24/2012 9:56:18 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Fluorene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Isophorone	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Naphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/17/2012 10:30:00 AM
Lab ID: 1210860-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
3-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/24/2012 9:56:18 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Phenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Pyridine	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Surr: 2,4,6-Tribromophenol	73.3	21.3-145		%REC	1	10/24/2012 9:56:18 PM
Surr: 2-Fluorobiphenyl	72.5	20-131		%REC	1	10/24/2012 9:56:18 PM
Surr: 2-Fluorophenol	71.3	11.9-130		%REC	1	10/24/2012 9:56:18 PM
Surr: 4-Terphenyl-d14	65.3	25.1-149		%REC	1	10/24/2012 9:56:18 PM
Surr: Nitrobenzene-d5	86.0	25.6-137		%REC	1	10/24/2012 9:56:18 PM
Surr: Phenol-d5	72.1	20.3-132		%REC	1	10/24/2012 9:56:18 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Benzene	0.00129	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Toluene	0.000908	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Ethylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Xylenes, Total	ND	0.00156		mg/Kg	1	10/19/2012 1:38:40 PM
Methyl tert-butyl ether (MTBE)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2,4-Trimethylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,3,5-Trimethylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dichloroethane (EDC)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dibromoethane (EDB)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Naphthalene	ND	0.00156		mg/Kg	1	10/19/2012 1:38:40 PM
1-Methylnaphthalene	ND	0.00313		mg/Kg	1	10/19/2012 1:38:40 PM
2-Methylnaphthalene	ND	0.00313		mg/Kg	1	10/19/2012 1:38:40 PM
Acetone	0.0202	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
Bromobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Bromodichloromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Bromoform	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Bromomethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
2-Butanone	ND	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
Carbon tetrachloride	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Chlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Chloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/17/2012 10:30:00 AM
Lab ID: 1210860-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
Chloroform	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Chloromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
2-Chlorotoluene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Carbon disulfide	ND	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
4-Chlorotoluene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
cis-1,2-DCE	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
cis-1,3-Dichloropropene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dibromo-3-chloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Dibromochloromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Dibromomethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,3-Dichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,4-Dichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Dichlorodifluoromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1-Dichloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1-Dichloroethene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dichloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,3-Dichloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
2,2-Dichloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1-Dichloropropene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Hexachlorobutadiene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Isopropylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
4-Isopropyltoluene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Methylene chloride	ND	0.00235		mg/Kg	1	10/19/2012 1:38:40 PM
n-Butylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
2-Hexanone	ND	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
n-Propylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
sec-Butylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Styrene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
4-Methyl-2-pentanone	ND	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
tert-Butylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1,1,2-Tetrachloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1,2,2-Tetrachloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Tetrachloroethene (PCE)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
trans-1,2-DCE	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
trans-1,3-Dichloropropene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2,3-Trichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2,4-Trichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1,1-Trichloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1,2-Trichloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Trichloroethene (TCE)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Trichlorofluoromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-24 (1.5-2')
Project: SWMU NO.14
Collection Date: 10/17/2012 10:30:00 AM
Lab ID: 1210860-002
Matrix: SOIL
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: **RAA**
1,2,3-Trichloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Vinyl chloride	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	10/19/2012 1:38:40 PM
Surr: 4-Bromofluorobenzene	82.8	70-130		%REC	1	10/19/2012 1:38:40 PM
Surr: Dibromofluoromethane	97.2	70-130		%REC	1	10/19/2012 1:38:40 PM
Surr: Toluene-d8	90.9	70-130		%REC	1	10/19/2012 1:38:40 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101712
Project: SWMU NO.14
Collection Date: 10/17/2012 11:00:00 AM
Lab ID: 1210860-003
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/20/2012 1:57:39 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/20/2012 1:57:39 AM
Surr: DNOP	98.9	79.5-166		%REC	1	10/20/2012 1:57:39 AM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	ND	0.10		mg/L	1	10/18/2012 2:51:00 PM
Chloride	ND	0.50		mg/L	1	10/18/2012 2:51:00 PM
Sulfate	ND	0.50		mg/L	1	10/18/2012 2:51:00 PM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	ND	0.0020		mg/L	1	10/24/2012 10:58:41 AM
Beryllium	ND	0.0020		mg/L	1	10/24/2012 10:58:41 AM
Cadmium	ND	0.0020		mg/L	1	10/24/2012 10:58:41 AM
Chromium	ND	0.0060		mg/L	1	10/24/2012 10:58:41 AM
Cobalt	ND	0.0060		mg/L	1	10/24/2012 10:58:41 AM
Iron	ND	0.020		mg/L	1	10/30/2012 10:09:01 AM
Manganese	ND	0.0020		mg/L	1	10/24/2012 10:58:41 AM
Nickel	ND	0.010		mg/L	1	10/24/2012 10:58:41 AM
Silver	ND	0.0050		mg/L	1	10/24/2012 10:58:41 AM
Vanadium	ND	0.050		mg/L	1	10/24/2012 10:58:41 AM
Zinc	ND	0.010		mg/L	1	10/24/2012 10:58:41 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/25/2012 7:22:08 PM
Arsenic	ND	0.0010		mg/L	1	10/25/2012 7:22:08 PM
Lead	ND	0.0010		mg/L	1	10/25/2012 7:22:08 PM
Selenium	ND	0.0010		mg/L	1	10/25/2012 7:22:08 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:56:59 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Acenaphthylene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Aniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Anthracene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Azobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benz(a)anthracene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzoic acid	ND	20		µg/L	1	10/22/2012 8:17:14 PM
Benzyl alcohol	ND	10		µg/L	1	10/22/2012 8:17:14 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101712
Project: SWMU NO.14
Collection Date: 10/17/2012 11:00:00 AM
Lab ID: 1210860-003
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Carbazole	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Chloroaniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Chlorophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Chrysene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/22/2012 8:17:14 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Dibenzofuran	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Diethyl phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Dimethyl phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/22/2012 8:17:14 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/22/2012 8:17:14 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/22/2012 8:17:14 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Fluoranthene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Fluorene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Hexachlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Hexachloroethane	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Isophorone	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Methylphenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
3+4-Methylphenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/22/2012 8:17:14 PM

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P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101712
Project: SWMU NO.14
Collection Date: 10/17/2012 11:00:00 AM
Lab ID: 1210860-003
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/22/2012 8:17:14 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Naphthalene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
3-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Nitrobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Nitrophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Nitrophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Pentachlorophenol	ND	20		µg/L	1	10/22/2012 8:17:14 PM
Phenanthrene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Phenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Pyrene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Pyridine	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Surr: 2,4,6-Tribromophenol	79.5	42.9-124		%REC	1	10/22/2012 8:17:14 PM
Surr: 2-Fluorobiphenyl	72.6	40-108		%REC	1	10/22/2012 8:17:14 PM
Surr: 2-Fluorophenol	52.9	23.6-94.8		%REC	1	10/22/2012 8:17:14 PM
Surr: 4-Terphenyl-d14	72.0	41.9-103		%REC	1	10/22/2012 8:17:14 PM
Surr: Nitrobenzene-d5	71.9	42.6-114		%REC	1	10/22/2012 8:17:14 PM
Surr: Phenol-d5	39.3	20.3-74.7		%REC	1	10/22/2012 8:17:14 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Toluene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Ethylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Naphthalene	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 5:03:12 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 5:03:12 PM
Acetone	ND	10		µg/L	1	10/19/2012 5:03:12 PM
Bromobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Bromoform	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Bromomethane	ND	3.0		µg/L	1	10/19/2012 5:03:12 PM
2-Butanone	ND	10		µg/L	1	10/19/2012 5:03:12 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101712
Project: SWMU NO.14
Collection Date: 10/17/2012 11:00:00 AM
Lab ID: 1210860-003
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	10		µg/L	1	10/19/2012 5:03:12 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Chlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Chloroethane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
Chloroform	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Chloromethane	ND	3.0		µg/L	1	10/19/2012 5:03:12 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Dibromomethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
2-Hexanone	ND	10		µg/L	1	10/19/2012 5:03:12 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/19/2012 5:03:12 PM
Methylene Chloride	ND	3.0		µg/L	1	10/19/2012 5:03:12 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/19/2012 5:03:12 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Styrene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101712
Project: SWMU NO.14
Collection Date: 10/17/2012 11:00:00 AM
Lab ID: 1210860-003
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
Vinyl chloride	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Xylenes, Total	ND	1.5		µg/L	1	10/19/2012 5:03:12 PM
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	10/19/2012 5:03:12 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	1	10/19/2012 5:03:12 PM
Surr: Dibromofluoromethane	98.0	70-130		%REC	1	10/19/2012 5:03:12 PM
Surr: Toluene-d8	113	70-130		%REC	1	10/19/2012 5:03:12 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/21/2012 1:50:20 PM
Surr: BFB	98.2	70-130		%REC	1	10/21/2012 1:50:20 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-OAPIS-1GW
Project: SWMU NO.14
Collection Date: 10/16/2012 9:00:00 AM
Lab ID: 1210860-004
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/20/2012 2:22:46 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/20/2012 2:22:46 AM
Surr: DNOP	103	79.5-166		%REC	1	10/20/2012 2:22:46 AM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	ND	0.10		mg/L	1	10/18/2012 2:26:11 PM
Chloride	ND	0.50		mg/L	1	10/18/2012 2:26:11 PM
Sulfate	ND	0.50		mg/L	1	10/18/2012 2:26:11 PM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	0.68	0.0020		mg/L	1	10/24/2012 11:16:26 AM
Beryllium	ND	0.0020		mg/L	1	10/24/2012 11:16:26 AM
Cadmium	ND	0.0020		mg/L	1	10/24/2012 11:16:26 AM
Chromium	0.012	0.0060		mg/L	1	10/24/2012 11:16:26 AM
Cobalt	0.044	0.0060		mg/L	1	10/24/2012 11:16:26 AM
Iron	5.6	0.20	*	mg/L	10	10/26/2012 3:07:03 PM
Manganese	2.0	0.010	*	mg/L	5	10/24/2012 11:19:39 AM
Nickel	0.13	0.010	*	mg/L	1	10/24/2012 11:16:26 AM
Silver	ND	0.0050		mg/L	1	10/24/2012 11:16:26 AM
Vanadium	ND	0.050		mg/L	1	10/24/2012 11:16:26 AM
Zinc	0.099	0.010		mg/L	1	10/24/2012 11:16:26 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0025		mg/L	2.5	10/24/2012 3:08:04 PM
Arsenic	0.0085	0.0025		mg/L	2.5	10/24/2012 3:08:04 PM
Lead	0.010	0.0025		mg/L	2.5	10/24/2012 3:08:04 PM
Selenium	0.016	0.0025		mg/L	2.5	10/24/2012 3:08:04 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:58:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Acenaphthylene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Aniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Anthracene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Azobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benz(a)anthracene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzoic acid	ND	20		µg/L	1	10/22/2012 8:46:44 PM
Benzyl alcohol	ND	10		µg/L	1	10/22/2012 8:46:44 PM

Qualifiers:

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Carbazole	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Chloroaniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Chlorophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Chrysene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/22/2012 8:46:44 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Dibenzofuran	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Diethyl phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Dimethyl phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/22/2012 8:46:44 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/22/2012 8:46:44 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/22/2012 8:46:44 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Fluoranthene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Fluorene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Hexachlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Hexachloroethane	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Isophorone	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Methylphenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
3+4-Methylphenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/22/2012 8:46:44 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-OAPIS-1GW
Project: SWMU NO.14
Collection Date: 10/16/2012 9:00:00 AM
Lab ID: 1210860-004
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/22/2012 8:46:44 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Naphthalene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
3-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Nitrobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Nitrophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Nitrophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Pentachlorophenol	ND	20		µg/L	1	10/22/2012 8:46:44 PM
Phenanthrene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Phenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Pyrene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Pyridine	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Surr: 2,4,6-Tribromophenol	76.2	42.9-124		%REC	1	10/22/2012 8:46:44 PM
Surr: 2-Fluorobiphenyl	75.3	40-108		%REC	1	10/22/2012 8:46:44 PM
Surr: 2-Fluorophenol	60.6	23.6-94.8		%REC	1	10/22/2012 8:46:44 PM
Surr: 4-Terphenyl-d14	77.9	41.9-103		%REC	1	10/22/2012 8:46:44 PM
Surr: Nitrobenzene-d5	90.4	42.6-114		%REC	1	10/22/2012 8:46:44 PM
Surr: Phenol-d5	45.7	20.3-74.7		%REC	1	10/22/2012 8:46:44 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	13	10		µg/L	10	10/19/2012 6:35:45 PM
Toluene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Ethylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Methyl tert-butyl ether (MTBE)	440	10		µg/L	10	10/19/2012 6:35:45 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Naphthalene	ND	20		µg/L	10	10/19/2012 6:35:45 PM
1-Methylnaphthalene	ND	40		µg/L	10	10/19/2012 6:35:45 PM
2-Methylnaphthalene	ND	40		µg/L	10	10/19/2012 6:35:45 PM
Acetone	ND	100		µg/L	10	10/19/2012 6:35:45 PM
Bromobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Bromodichloromethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Bromoform	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Bromomethane	ND	30		µg/L	10	10/19/2012 6:35:45 PM
2-Butanone	ND	100		µg/L	10	10/19/2012 6:35:45 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-OAPIS-1GW
Project: SWMU NO.14
Collection Date: 10/16/2012 9:00:00 AM
Lab ID: 1210860-004
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	100		µg/L	10	10/19/2012 6:35:45 PM
Carbon Tetrachloride	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Chlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Chloroethane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
Chloroform	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Chloromethane	ND	30		µg/L	10	10/19/2012 6:35:45 PM
2-Chlorotoluene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
4-Chlorotoluene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
cis-1,2-DCE	ND	10		µg/L	10	10/19/2012 6:35:45 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
Dibromochloromethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Dibromomethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Dichlorodifluoromethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1-Dichloroethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1-Dichloroethene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dichloropropane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,3-Dichloropropane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
2,2-Dichloropropane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
1,1-Dichloropropene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Hexachlorobutadiene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
2-Hexanone	ND	100		µg/L	10	10/19/2012 6:35:45 PM
Isopropylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
4-Isopropyltoluene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	10/19/2012 6:35:45 PM
Methylene Chloride	ND	30		µg/L	10	10/19/2012 6:35:45 PM
n-Butylbenzene	ND	30		µg/L	10	10/19/2012 6:35:45 PM
n-Propylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
sec-Butylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Styrene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
tert-Butylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	10/19/2012 6:35:45 PM
trans-1,2-DCE	ND	10		µg/L	10	10/19/2012 6:35:45 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SWMU 14-OAPIS-1GW
Project: SWMU NO.14
Collection Date: 10/16/2012 9:00:00 AM
Lab ID: 1210860-004
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Trichloroethene (TCE)	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Trichlorofluoromethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
Vinyl chloride	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Xylenes, Total	ND	15		µg/L	10	10/19/2012 6:35:45 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	10	10/19/2012 6:35:45 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	10	10/19/2012 6:35:45 PM
Surr: Dibromofluoromethane	92.5	70-130		%REC	10	10/19/2012 6:35:45 PM
Surr: Toluene-d8	110	70-130		%REC	10	10/19/2012 6:35:45 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.50		mg/L	10	10/22/2012 1:13:58 AM
Surr: BFB	94.3	70-130		%REC	10	10/22/2012 1:13:58 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101612
Project: SWMU NO.14
Collection Date: 10/16/2012 5:20:00 PM
Lab ID: 1210860-005
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/20/2012 2:47:36 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/20/2012 2:47:36 AM
Surr: DNOP	99.6	79.5-166		%REC	1	10/20/2012 2:47:36 AM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	2.9	0.50		mg/L	5	10/18/2012 4:05:28 PM
Chloride	1900	100		mg/L	200	10/19/2012 1:10:23 PM
Sulfate	100	2.5		mg/L	5	10/18/2012 4:05:28 PM
EPA METHOD 200.7: METALS						Analyst: **ELS**
Barium	ND	0.0020		mg/L	1	10/24/2012 11:32:58 AM
Beryllium	ND	0.0020		mg/L	1	10/24/2012 11:32:58 AM
Cadmium	ND	0.0020		mg/L	1	10/24/2012 11:32:58 AM
Chromium	ND	0.0060		mg/L	1	10/24/2012 11:32:58 AM
Cobalt	0.0072	0.0060		mg/L	1	10/24/2012 11:32:58 AM
Iron	ND	0.020		mg/L	1	11/5/2012 1:26:43 PM
Manganese	ND	0.0020		mg/L	1	10/24/2012 11:32:58 AM
Nickel	ND	0.010		mg/L	1	10/24/2012 11:32:58 AM
Silver	ND	0.0050		mg/L	1	10/24/2012 11:32:58 AM
Vanadium	ND	0.050		mg/L	1	10/24/2012 11:32:58 AM
Zinc	ND	0.010		mg/L	1	10/24/2012 11:32:58 AM
EPA 200.8: METALS						Analyst: **DBD**
Antimony	ND	0.0010		mg/L	1	10/25/2012 7:26:04 PM
Arsenic	ND	0.0010		mg/L	1	10/25/2012 7:26:04 PM
Lead	ND	0.0010		mg/L	1	10/25/2012 7:26:04 PM
Selenium	ND	0.0010		mg/L	1	10/25/2012 7:26:04 PM
EPA METHOD 245.1: MERCURY						Analyst: **IDC**
Mercury	ND	0.00020		mg/L	1	10/24/2012 8:00:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Acenaphthylene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Aniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Anthracene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Azobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benz(a)anthracene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzoic acid	ND	20		µg/L	1	10/22/2012 9:16:11 PM
Benzyl alcohol	ND	10		µg/L	1	10/22/2012 9:16:11 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101612
Project: SWMU NO.14
Collection Date: 10/16/2012 5:20:00 PM
Lab ID: 1210860-005
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Carbazole	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Chloroaniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Chlorophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Chrysene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/22/2012 9:16:11 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Dibenzofuran	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
3,3´-Dichlorobenzidine	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Diethyl phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Dimethyl phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/22/2012 9:16:11 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/22/2012 9:16:11 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/22/2012 9:16:11 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Fluoranthene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Fluorene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Hexachlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Hexachloroethane	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Isophorone	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Methylphenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
3+4-Methylphenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/22/2012 9:16:11 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101612
Project: SWMU NO.14
Collection Date: 10/16/2012 5:20:00 PM
Lab ID: 1210860-005
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodimethylamine	ND	10		µg/L	1	10/22/2012 9:16:11 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Naphthalene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Nitroaniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
3-Nitroaniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Nitroaniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Nitrobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Nitrophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Nitrophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Pentachlorophenol	ND	20		µg/L	1	10/22/2012 9:16:11 PM
Phenanthrene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Phenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Pyrene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Pyridine	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Surr: 2,4,6-Tribromophenol	77.4	42.9-124		%REC	1	10/22/2012 9:16:11 PM
Surr: 2-Fluorobiphenyl	69.2	40-108		%REC	1	10/22/2012 9:16:11 PM
Surr: 2-Fluorophenol	48.2	23.6-94.8		%REC	1	10/22/2012 9:16:11 PM
Surr: 4-Terphenyl-d14	66.3	41.9-103		%REC	1	10/22/2012 9:16:11 PM
Surr: Nitrobenzene-d5	74.3	42.6-114		%REC	1	10/22/2012 9:16:11 PM
Surr: Phenol-d5	39.2	20.3-74.7		%REC	1	10/22/2012 9:16:11 PM
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Toluene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Ethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Naphthalene	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 7:06:33 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 7:06:33 PM
Acetone	ND	10		µg/L	1	10/19/2012 7:06:33 PM
Bromobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Bromoform	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Bromomethane	ND	3.0		µg/L	1	10/19/2012 7:06:33 PM
2-Butanone	ND	10		µg/L	1	10/19/2012 7:06:33 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101612
Project: SWMU NO.14
Collection Date: 10/16/2012 5:20:00 PM
Lab ID: 1210860-005
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Carbon disulfide	ND	10		µg/L	1	10/19/2012 7:06:33 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Chlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Chloroethane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
Chloroform	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Chloromethane	ND	3.0		µg/L	1	10/19/2012 7:06:33 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Dibromomethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
2-Hexanone	ND	10		µg/L	1	10/19/2012 7:06:33 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/19/2012 7:06:33 PM
Methylene Chloride	ND	3.0		µg/L	1	10/19/2012 7:06:33 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/19/2012 7:06:33 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Styrene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB101612
Project: SWMU NO.14
Collection Date: 10/16/2012 5:20:00 PM
Lab ID: 1210860-005
Matrix: AQUEOUS
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
Vinyl chloride	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Xylenes, Total	ND	1.5		µg/L	1	10/19/2012 7:06:33 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	10/19/2012 7:06:33 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	1	10/19/2012 7:06:33 PM
Surr: Dibromofluoromethane	97.0	70-130		%REC	1	10/19/2012 7:06:33 PM
Surr: Toluene-d8	117	70-130		%REC	1	10/19/2012 7:06:33 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/21/2012 2:18:53 PM
Surr: BFB	83.5	70-130		%REC	1	10/21/2012 2:18:53 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.14
Collection Date:
Lab ID: 1210860-006
Matrix: TRIP BLANK
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/21/2012 2:08:01 AM
Toluene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Ethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Naphthalene	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 7:37:20 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 7:37:20 PM
Acetone	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Bromobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Bromoform	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Bromomethane	ND	3.0		µg/L	1	10/19/2012 7:37:20 PM
2-Butanone	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Carbon disulfide	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Chlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Chloroethane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
Chloroform	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Chloromethane	ND	3.0		µg/L	1	10/19/2012 7:37:20 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Dibromomethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: SWMU NO.14
Collection Date:
Lab ID: 1210860-006
Matrix: TRIP BLANK
Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DJF**
2-Hexanone	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Methylene Chloride	ND	3.0		µg/L	1	10/19/2012 7:37:20 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/19/2012 7:37:20 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Styrene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
Vinyl chloride	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Xylenes, Total	ND	1.5		µg/L	1	10/19/2012 7:37:20 PM
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	10/19/2012 7:37:20 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/19/2012 7:37:20 PM
Surr: Dibromofluoromethane	88.3	70-130		%REC	1	10/19/2012 7:37:20 PM
Surr: Toluene-d8	113	70-130		%REC	1	10/19/2012 7:37:20 PM
Surr: BFB	97.7	70-130		%REC	1	10/21/2012 2:08:01 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019048
Project Name: 1210860

Analytical Results Report

Sample Number 121019048-001 **Sampling Date** 10/17/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210860-001D / SWMU 14-24 (0-0.5) **Sampling Time** 10:15 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.263	10/30/2012	CRW	EPA 335.4	
%moisture	5.4	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019048-002 **Sampling Date** 10/17/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210860-002D / SWMU 14-24 (1.5-2) **Sampling Time** 10:30 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.311	10/30/2012	CRW	EPA 335.4	
%moisture	19.9	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019048-003 **Sampling Date** 10/17/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210860-003F / EB101712 **Sampling Time** 11:00 AM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/30/2012	CRW	EPA 335.4	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121019048
Project Name: 1210860

Analytical Results Report

Sample Number 121019048-004 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210860-004F / SWMU 14-OAPIS-1GW **Sampling Time** 9:00 AM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0899	mg/L	0.01	10/29/2012	CRW	EPA 335.4	

Sample Number 121019048-005 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210860-005F / EB101612 **Sampling Time** 5:20 PM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/29/2012	CRW	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6448** RunNo: **6448**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **185486** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6448** RunNo: **6448**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **185487** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.3	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	98.2	85	115			
Cobalt	0.47	0.0060	0.5000	0	94.4	85	115			
Manganese	0.48	0.0020	0.5000	0	95.2	85	115			
Nickel	0.46	0.010	0.5000	0	92.9	85	115			
Silver	0.099	0.0050	0.1000	0	98.7	85	115			
Vanadium	0.52	0.050	0.5000	0	103	85	115			
Zinc	0.49	0.010	0.5000	0	98.7	85	115			

Sample ID **1210860-005EMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **EB101612** Batch ID: **R6448** RunNo: **6448**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **185584** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0.0005100	101	70	130			
Beryllium	0.54	0.0020	0.5000	0	108	70	130			
Cadmium	0.52	0.0020	0.5000	0	104	70	130			
Chromium	0.50	0.0060	0.5000	0	99.8	70	130			
Cobalt	0.49	0.0060	0.5000	0.007250	96.8	70	130			
Manganese	0.49	0.0020	0.5000	0	98.4	70	130			
Nickel	0.48	0.010	0.5000	0	95.8	70	130			
Silver	0.10	0.0050	0.1000	0	103	70	130			
Vanadium	0.53	0.050	0.5000	0	106	70	130			
Zinc	0.50	0.010	0.5000	0	101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210860-005EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **EB101612** Batch ID: **R6448** RunNo: **6448**
Prep Date: Analysis Date: **10/24/2012** SeqNo: **185585** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0.0005100	100	70	130	0.371	20	
Beryllium	0.54	0.0020	0.5000	0	108	70	130	0.157	20	
Cadmium	0.52	0.0020	0.5000	0	104	70	130	0.178	20	
Chromium	0.50	0.0060	0.5000	0	99.3	70	130	0.460	20	
Cobalt	0.49	0.0060	0.5000	0.007250	96.4	70	130	0.406	20	
Manganese	0.49	0.0020	0.5000	0	98.0	70	130	0.393	20	
Nickel	0.48	0.010	0.5000	0	95.4	70	130	0.513	20	
Silver	0.10	0.0050	0.1000	0	103	70	130	0.0872	20	
Vanadium	0.53	0.050	0.5000	0	106	70	130	0.179	20	
Zinc	0.50	0.010	0.5000	0	99.4	70	130	1.40	20	

Sample ID **MB-4467** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4467** RunNo: **6517**
Prep Date: **10/23/2012** Analysis Date: **10/26/2012** SeqNo: **188054** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS-4467** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **4467** RunNo: **6517**
Prep Date: **10/23/2012** Analysis Date: **10/26/2012** SeqNo: **188055** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	99.0	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6577** RunNo: **6577**
Prep Date: Analysis Date: **10/30/2012** SeqNo: **189771** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6577** RunNo: **6577**
Prep Date: Analysis Date: **10/30/2012** SeqNo: **189772** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.52	0.020	0.5000	0	104	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4467** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **4467** RunNo: **6448**
Prep Date: **10/23/2012** Analysis Date: **10/24/2012** SeqNo: **191046** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID **LCS-4467** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **4467** RunNo: **6448**
Prep Date: **10/23/2012** Analysis Date: **10/24/2012** SeqNo: **191048** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.3	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.7	85	115			
Chromium	0.48	0.0060	0.5000	0	96.3	85	115			
Cobalt	0.46	0.0060	0.5000	0	92.3	85	115			
Manganese	0.47	0.0020	0.5000	0	93.4	85	115			
Nickel	0.46	0.010	0.5000	0	91.2	85	115			
Silver	0.087	0.0050	0.1000	0	86.5	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			
Zinc	0.48	0.010	0.5000	0	95.6	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **R6689** RunNo: **6689**
Prep Date: Analysis Date: **11/5/2012** SeqNo: **193297** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **R6689** RunNo: **6689**
Prep Date: Analysis Date: **11/5/2012** SeqNo: **193298** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.0	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210860-005EMS** SampType: **MS** TestCode: **EPA Method 200.7: Metals**
Client ID: **EB101612** Batch ID: **R6689** RunNo: **6689**
Prep Date: Analysis Date: **11/5/2012** SeqNo: **193607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	100	70	130			

Sample ID **1210860-005EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Metals**
Client ID: **EB101612** Batch ID: **R6689** RunNo: **6689**
Prep Date: Analysis Date: **11/5/2012** SeqNo: **193608** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	100	70	130	0.290	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4467** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **4467** RunNo: **6466**
Prep Date: **10/23/2012** Analysis Date: **10/24/2012** SeqNo: **185968** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								
Selenium	ND	0.0025								

Sample ID **1209C98-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186650** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.031	0.0010	0.02500	0.005774	102	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186664** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186665** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	104	85	115			
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Lead	0.027	0.0010	0.02500	0	106	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186667** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **186668** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **1210516-002BMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187056** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	102	70	130			
Lead	0.029	0.0010	0.02500	0.002703	104	70	130			
Selenium	0.026	0.0010	0.02500	0	102	70	130			

Sample ID **1210544-001CMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187059** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.2	70	130			
Arsenic	0.027	0.0010	0.02500	0.001693	101	70	130			
Selenium	0.026	0.0010	0.02500	0.001046	100	70	130			

Sample ID **1210724-001AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187071** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.048	0.0010	0.02500	0.02319	99.5	70	130			

Sample ID **1210724-010AMS** SampType: **MS** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187081** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.029	0.0010	0.02500	0.004033	101	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.9	85	115			
Arsenic	0.025	0.0010	0.02500	0	100	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187101** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.2	85	115			
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187102** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **R6483** RunNo: **6483**
Prep Date: Analysis Date: **10/25/2012** SeqNo: **187103** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4503** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186274** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-4503** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186276** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.2	80	120			

Sample ID **1210675-003BMS** SampType: **ms** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186299** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	83.0	75	125			

Sample ID **1210675-003BMSD** SampType: **msd** TestCode: **EPA Method 245.1: Mercury**
Client ID: **BatchQC** Batch ID: **4503** RunNo: **6470**
Prep Date: **10/24/2012** Analysis Date: **10/24/2012** SeqNo: **186300** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0	80.1	75	125	3.62	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6352** RunNo: **6352**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182755** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6352** RunNo: **6352**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182756** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.3	90	110			
Chloride	5.1	0.50	5.000	0	102	90	110			
Sulfate	10	0.50	10.00	0	100	90	110			

Sample ID **1210862-002BMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6352** RunNo: **6352**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182769** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.78	0.10	0.5000	0	157	76.6	110			S
Chloride	8.3	0.50	5.000	4.950	66.3	87.8	111			S
Sulfate	71	0.50	10.00	52.29	185	84.6	122			SE

Sample ID **1210862-002BMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R6352** RunNo: **6352**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182770** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.78	0.10	0.5000	0	155	76.6	110	0.813	20	S
Chloride	8.2	0.50	5.000	4.950	65.9	87.8	111	0.230	20	S
Sulfate	71	0.50	10.00	52.29	184	84.6	122	0.106	20	SE

Sample ID **1210860-003CMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB101712** Batch ID: **R6352** RunNo: **6352**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182775** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.5	76.6	110			
Chloride	4.9	0.50	5.000	0	98.4	87.8	111			
Sulfate	9.6	0.50	10.00	0	96.3	84.6	122			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210860-003CMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **EB101712** Batch ID: **R6352** RunNo: **6352**
Prep Date: Analysis Date: **10/18/2012** SeqNo: **182776** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.1	76.6	110	0.572	20	
Chloride	4.9	0.50	5.000	0	98.3	87.8	111	0.126	20	
Sulfate	9.7	0.50	10.00	0	97.3	84.6	122	1.05	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R6364** RunNo: **6364**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **183032** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R6364** RunNo: **6364**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **183033** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.1	0.50	5.000	0	102	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4397** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4397** RunNo: **6325**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182283** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID **LCS-4397** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4397** RunNo: **6325**
Prep Date: **10/18/2012** Analysis Date: **10/18/2012** SeqNo: **182284** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	111	52.6	130			
Surr: DNOP	4.3		5.000		86.9	77.6	140			

Sample ID **MB-4404** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182984** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.6	77.6	140			

Sample ID **LCS-4404** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **182985** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Sample ID **1210819-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183001** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID **1210819-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **4404** RunNo: **6356**
Prep Date: **10/18/2012** Analysis Date: **10/19/2012** SeqNo: **183002** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**MB-4430**	SampType:	**MBLK**	TestCode:	**EPA Method 8015B: Diesel Range**					
Client ID:	**PBW**	Batch ID:	**4430**	RunNo:	**6372**					
Prep Date:	**10/19/2012**	Analysis Date:	**10/20/2012**	SeqNo:	**183215**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.98		1.000		98.2	79.5	166			

Sample ID	**LCS-4430**	SampType:	**LCS**	TestCode:	**EPA Method 8015B: Diesel Range**					
Client ID:	**LCSW**	Batch ID:	**4430**	RunNo:	**6372**					
Prep Date:	**10/19/2012**	Analysis Date:	**10/20/2012**	SeqNo:	**183216**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.5	1.0	5.000	0	90.1	74	157			
Surr: DNOP	0.60		0.5000		121	79.5	166			

Sample ID	**LCSD-4430**	SampType:	**LCSD**	TestCode:	**EPA Method 8015B: Diesel Range**					
Client ID:	**LCSS02**	Batch ID:	**4430**	RunNo:	**6372**					
Prep Date:	**10/19/2012**	Analysis Date:	**10/20/2012**	SeqNo:	**183217**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.6	1.0	5.000	0	91.2	74	157	1.18	23	
Surr: DNOP	0.61		0.5000		122	79.5	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4510** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **4510** RunNo: **6518**
Prep Date: **10/24/2012** Analysis Date: **10/27/2012** SeqNo: **188108** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		96.6	84	116			

Sample ID **LCS-4510** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **4510** RunNo: **6518**
Prep Date: **10/24/2012** Analysis Date: **10/27/2012** SeqNo: **188109** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	74	117			
Surr: BFB	1000		1000		103	84	116			

Sample ID **1210A72-002AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4510** RunNo: **6518**
Prep Date: **10/24/2012** Analysis Date: **10/27/2012** SeqNo: **188121** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.65	2.267	96.2	70	130			
Surr: BFB	1100		986.2		109	84	116			

Sample ID **1210A72-002AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **4510** RunNo: **6518**
Prep Date: **10/24/2012** Analysis Date: **10/27/2012** SeqNo: **188122** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.61	2.267	96.0	70	130	0.425	22.1	
Surr: BFB	1100		984.3		107	84	116	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4419**	SampType: **MBLK**	TestCode: **Method 8260B/5035LOW: VOLATILES**			
Client ID: **PBS**	Batch ID: **4419**	RunNo: **6365**			
Prep Date: **10/19/2012**	Analysis Date: **10/19/2012**	SeqNo: **183060**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4419** SampType: **MBLK** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **PBS** Batch ID: **4419** RunNo: **6365**
Prep Date: **10/19/2012** Analysis Date: **10/19/2012** SeqNo: **183060** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	0.00320	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.7		50.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	43.0		50.00		85.9	70	130			
Surr: Dibromofluoromethane	50.0		50.00		100	70	130			
Surr: Toluene-d8	51.0		50.00		102	70	130			

Sample ID **lcs-4419** SampType: **LCS** TestCode: **Method 8260B/5035LOW: VOLATILES**
Client ID: **LCSS** Batch ID: **4419** RunNo: **6365**
Prep Date: **10/19/2012** Analysis Date: **10/19/2012** SeqNo: **183062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.7	1.00	12.50	0	93.9	60	140			
Toluene	10.2	1.00	12.50	0	82.0	60	140			
Chlorobenzene	11.9	1.00	12.50	0	94.9	60	140			
1,1-Dichloroethene	14.5	1.00	12.50	0	116	60	140			
Trichloroethene (TCE)	9.39	1.00	12.50	0	75.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.4		50.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	41.6		50.00		83.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**lcs-4419**	SampType:	**LCS**	TestCode:	**Method 8260B/5035LOW: VOLATILES**
Client ID:	**LCSS**	Batch ID:	**4419**	RunNo:	**6365**
Prep Date:	**10/19/2012**	Analysis Date:	**10/19/2012**	SeqNo:	**183062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.8		50.00		93.6	70	130			
Surr: Toluene-d8	46.1		50.00		92.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R6386**	RunNo: **6386**			
Prep Date:	Analysis Date: **10/19/2012**	SeqNo: **183508**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R6386** RunNo: **6386**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **183508** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.2	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6386** RunNo: **6386**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **183534** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.6	70	130			
Toluene	18	1.0	20.00	0	92.4	80	120			
Chlorobenzene	19	1.0	20.00	0	95.0	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	97.1	73.7	122			
Trichloroethene (TCE)	17	1.0	20.00	0	83.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.4	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		115	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R6386** RunNo: **6386**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **183534** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.1		10.00		81.3	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **1210860-003a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EB101712** Batch ID: **R6386** RunNo: **6386**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **183536** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.2	66.8	128			
Toluene	19	1.0	20.00	0	95.7	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	104	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0.4600	82.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.3	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		88.5	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.2	70	130			
Surr: Toluene-d8	11		10.00		109	70	130			

Sample ID **1210860-003a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EB101712** Batch ID: **R6386** RunNo: **6386**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **183559** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.6	66.8	128	4.84	16.7	
Toluene	18	1.0	20.00	0	91.3	70	130	4.75	18.7	
Chlorobenzene	19	1.0	20.00	0	95.3	70	130	5.49	19.5	
1,1-Dichloroethene	19	1.0	20.00	0	93.4	70	130	10.5	16.7	
Trichloroethene (TCE)	16	1.0	20.00	0.4600	77.0	70	130	6.12	17.5	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130	0	0	
Surr: Dibromofluoromethane	8.4		10.00		84.4	70	130	0	0	
Surr: Toluene-d8	11		10.00		106	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-4422** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185414** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	74.7	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	76.9	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	75.3	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.0	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	79.3	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.1	39.1	86.9			
4-Nitrophenol	2.4	0.25	3.330	0	73.5	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	61.6	36.2	80			
Phenol	2.4	0.20	3.330	0	72.5	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.5	0.20	1.670	0	91.6	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		103	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		95.5	20	131			
Surr: 2-Fluorophenol	2.8		3.330		83.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.6	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.9	25.6	137			
Surr: Phenol-d5	3.0		3.330		89.0	20.3	132			

Sample ID **mb-4422** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4422**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBS**	Batch ID: **4422**	RunNo: **6445**			
Prep Date: **10/19/2012**	Analysis Date: **10/23/2012**	SeqNo: **185416**	Units: **mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3´-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4422** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.9		3.330		117	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		98.4	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.6	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		109	25.6	137			
Surr: Phenol-d5	3.2		3.330		96.3	20.3	132			

Sample ID **1210858-004Cms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185433** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.659	0	69.3	25.6	142			
4-Chloro-3-methylphenol	2.2	0.50	3.309	0	67.6	63.7	100			
2-Chlorophenol	2.0	0.20	3.309	0	61.7	22.2	126			
1,4-Dichlorobenzene	1.1	0.20	1.659	0	63.6	12.4	115			
2,4-Dinitrotoluene	1.2	0.50	1.659	0	74.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	0.20	1.659	0	65.9	13.9	136			
4-Nitrophenol	2.2	0.25	3.309	0.09121	63.6	36.7	130			
Pentachlorophenol	1.9	0.40	3.309	0	56.5	15.8	113			
Phenol	2.1	0.20	3.309	0	63.9	25.1	124			
Pyrene	1.1	0.20	1.659	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.3	0.20	1.659	0	78.0	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.309		90.3	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.659		90.0	20	131			
Surr: 2-Fluorophenol	2.5		3.309		74.2	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		80.0	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.659		101	25.6	137			
Surr: Phenol-d5	2.8		3.309		84.0	20.3	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210858-004Cmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **BatchQC** Batch ID: **4422** RunNo: **6445**
Prep Date: **10/19/2012** Analysis Date: **10/23/2012** SeqNo: **185434** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.681	0	71.3	25.6	142	4.05	22	
4-Chloro-3-methylphenol	2.3	0.50	3.351	0	69.5	63.7	100	4.10	27.3	
2-Chlorophenol	2.3	0.20	3.351	0	68.2	22.2	126	11.4	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.681	0	63.4	12.4	115	1.02	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.681	0	77.0	14.9	142	4.43	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.681	0	75.9	13.9	136	15.3	22.6	
4-Nitrophenol	2.3	0.25	3.351	0.09121	64.9	36.7	130	3.21	20	
Pentachlorophenol	2.0	0.40	3.351	0	59.9	15.8	113	7.18	27.1	
Phenol	2.2	0.20	3.351	0	66.5	25.1	124	5.18	32.2	
Pyrene	1.2	0.20	1.681	0	70.8	35.8	124	4.36	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.681	0	80.5	30	113	4.34	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.351		93.6	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.681		91.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.351		75.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.681		81.4	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.681		96.9	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.351		85.9	20.3	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **mb-4411**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **4411**	RunNo: **6416**			
Prep Date: **10/19/2012**	Analysis Date: **10/22/2012**	SeqNo: **184532**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**mb-4411**	SampType:	**MBLK**	TestCode:	**EPA Method 8270C: Semivolatiles**		
Client ID:	**PBW**	Batch ID:	**4411**	RunNo:	**6416**		
Prep Date:	**10/19/2012**	Analysis Date:	**10/22/2012**	SeqNo:	**184532**	Units:	**µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	180		200.0		89.0	42.9	124			
Surr: 2-Fluorobiphenyl	74		100.0		73.7	40	108			
Surr: 2-Fluorophenol	130		200.0		63.3	23.6	94.8			
Surr: 4-Terphenyl-d14	75		100.0		74.5	41.9	103			
Surr: Nitrobenzene-d5	91		100.0		90.8	42.6	114			
Surr: Phenol-d5	100		200.0		49.9	20.3	74.7			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **lcs-4411** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **4411** RunNo: **6416**
Prep Date: **10/19/2012** Analysis Date: **10/22/2012** SeqNo: **184533** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	69	10	100.0	0	69.3	43.3	92			
4-Chloro-3-methylphenol	150	10	200.0	0	72.7	46.3	108			
2-Chlorophenol	130	10	200.0	0	65.3	38	99.3			
1,4-Dichlorobenzene	62	10	100.0	0	61.6	30.8	80.6			
2,4-Dinitrotoluene	73	10	100.0	0	73.1	46.1	117			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	39.3	110			
4-Nitrophenol	80	10	200.0	0	39.8	29.8	67			
Pentachlorophenol	110	20	200.0	0	55.3	32.2	95.7			
Phenol	78	10	200.0	0	39.2	27	64.8			
Pyrene	72	10	100.0	0	71.5	44.7	97.3			
1,2,4-Trichlorobenzene	73	10	100.0	0	72.7	36.6	86.7			
Surr: 2,4,6-Tribromophenol	170		200.0		87.4	42.9	124			
Surr: 2-Fluorobiphenyl	81		100.0		81.3	40	108			
Surr: 2-Fluorophenol	120		200.0		60.0	23.6	94.8			
Surr: 4-Terphenyl-d14	74		100.0		74.1	41.9	103			
Surr: Nitrobenzene-d5	85		100.0		84.8	42.6	114			
Surr: Phenol-d5	100		200.0		50.3	20.3	74.7			

Sample ID **lcsd-4411** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **4411** RunNo: **6416**
Prep Date: **10/19/2012** Analysis Date: **10/22/2012** SeqNo: **184535** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	63	10	100.0	0	62.5	43.3	92	10.3	25	
4-Chloro-3-methylphenol	140	10	200.0	0	67.6	46.3	108	7.30	32.7	
2-Chlorophenol	120	10	200.0	0	59.8	38	99.3	8.77	20	
1,4-Dichlorobenzene	54	10	100.0	0	53.8	30.8	80.6	13.6	20	
2,4-Dinitrotoluene	70	10	100.0	0	70.2	46.1	117	4.16	29.9	
N-Nitrosodi-n-propylamine	65	10	100.0	0	64.8	39.3	110	11.9	23.1	
4-Nitrophenol	75	10	200.0	0	37.7	29.8	67	5.34	40.5	
Pentachlorophenol	110	20	200.0	0	54.1	32.2	95.7	2.07	37.3	
Phenol	68	10	200.0	0	34.1	27	64.8	14.1	20	
Pyrene	68	10	100.0	0	67.9	44.7	97.3	5.13	26.5	
1,2,4-Trichlorobenzene	67	10	100.0	0	66.7	36.6	86.7	8.58	27.2	
Surr: 2,4,6-Tribromophenol	170		200.0		87.5	42.9	124	0	0	
Surr: 2-Fluorobiphenyl	72		100.0		71.5	40	108	0	0	
Surr: 2-Fluorophenol	110		200.0		53.9	23.6	94.8	0	0	
Surr: 4-Terphenyl-d14	72		100.0		72.5	41.9	103	0	0	
Surr: Nitrobenzene-d5	77		100.0		76.5	42.6	114	0	0	
Surr: Phenol-d5	90		200.0		45.1	20.3	74.7	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4629** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **4629** RunNo: **6634**
Prep Date: **11/1/2012** Analysis Date: **11/1/2012** SeqNo: **191517** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-4629** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **4629** RunNo: **6634**
Prep Date: **11/1/2012** Analysis Date: **11/1/2012** SeqNo: **191518** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID **1210859-003CMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4629** RunNo: **6634**
Prep Date: **11/1/2012** Analysis Date: **11/1/2012** SeqNo: **191520** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1609	0.02890	103	75	125			

Sample ID **1210859-003CMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **4629** RunNo: **6634**
Prep Date: **11/1/2012** Analysis Date: **11/1/2012** SeqNo: **191521** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.22	0.033	0.1651	0.02890	113	75	125	10.5	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **MB-4440** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186820** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	0.64	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-4440** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186821** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0.6605	96.6	80	120			
Arsenic	25	2.5	25.00	0	102	80	120			
Barium	25	0.10	25.00	0	98.6	80	120			
Beryllium	26	0.15	25.00	0	103	80	120			
Cadmium	25	0.10	25.00	0	98.8	80	120			
Chromium	25	0.30	25.00	0	99.0	80	120			
Cobalt	24	0.30	25.00	0	95.6	80	120			
Lead	24	0.25	25.00	0	96.6	80	120			
Manganese	24	0.10	25.00	0.05400	96.6	80	120			
Nickel	24	0.50	25.00	0	94.2	80	120			
Selenium	24	2.5	25.00	0	94.1	80	120			
Silver	6.0	0.25	5.000	0.6425	106	80	120			B
Vanadium	25	2.5	25.00	0	102	80	120			
Zinc	24	2.5	25.00	0	97.3	80	120			

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.93	2.265	83.0	75	125			
Cadmium	20	0.10	24.93	0.03505	80.0	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	25	0.30	24.93	3.270	86.6	75	125			
Selenium	17	2.5	24.93	0	68.1	75	125			S

Sample ID **1210771-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6493**
Prep Date: **10/22/2012** Analysis Date: **10/25/2012** SeqNo: **186849** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.96	2.265	81.7	75	125	1.34	20	
Cadmium	19	0.10	24.96	0.03505	77.2	75	125	3.39	20	
Chromium	24	0.30	24.96	3.270	84.2	75	125	2.39	20	
Selenium	15	2.5	24.96	0	61.4	75	125	10.1	20	S

Sample ID **MB-4440** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188992** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID **LCS-4440** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **188993** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.7	0.25	5.000	0	113	80	120			

Sample ID **1210771-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **189043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.3	0.25	4.987	0	85.5	75	125			

Sample ID **1210771-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **BatchQC** Batch ID: **4440** RunNo: **6546**
Prep Date: **10/22/2012** Analysis Date: **10/29/2012** SeqNo: **189044** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.0	0.25	4.992	0	80.9	75	125	5.39	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID	**MB-4440**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**4440**	RunNo:	**6670**
Prep Date:	**10/22/2012**	Analysis Date:	**11/2/2012**	SeqNo:	**192431** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	**LCS-4440**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**4440**	RunNo:	**6670**
Prep Date:	**10/22/2012**	Analysis Date:	**11/2/2012**	SeqNo:	**192432** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	109	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1210860**
15-Nov-12

Client: Western Refining Southwest, Gallup
Project: SWMU NO.14

Sample ID **b6** SampType: **MBLK** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184074** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		95.8	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/19/2012** SeqNo: **184077** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	86.2	85	115			
Surr: BFB	10		10.00		99.9	70	130			

Sample ID **1210660-001ams** SampType: **MS** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184078** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.0	0.25	2.500	1.915	82.1	70	130			
Surr: BFB	46		50.00		91.6	70	130			

Sample ID **1210660-001amsd** SampType: **MSD** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R6394** RunNo: **6394**
Prep Date: Analysis Date: **10/20/2012** SeqNo: **184079** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3.8	0.25	2.500	1.915	76.4	70	130	3.70	20	
Surr: BFB	51		50.00		102	70	130	0	0	

Sample ID **5ml rb** SampType: **MBLK** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **PBW** Batch ID: **R6402** RunNo: **6402**
Prep Date: Analysis Date: **10/21/2012** SeqNo: **184122** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.5		10.00		95.0	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **Modified EPA Method 8015B: Gasoline Range**
Client ID: **LCSW** Batch ID: **R6402** RunNo: **6402**
Prep Date: Analysis Date: **10/21/2012** SeqNo: **184125** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	85	115			
Surr: BFB	9.6		10.00		95.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210860

Received by/date: AT 10/18/12

Logged By: **Michelle Garcia** 10/18/2012 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/18/2012 9:43:44 AM Michelle Garcia

Reviewed By: 10/18/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH-RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210860	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/17/12	1015	SOIL	SWMU 14-24 (0-0.5')	2 VIALS	SOBI	-001										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1030		SWMU 14-24 (1.5-2')	2 VIALS	SOBI	-002										X						
				2 VIALS	MEOH											X						
				3 JARS	—											X	X	X	X			
	1100	W	EB101712	6 VOA	HCL & NEAT	-003										X						
				1 AMBER	—												X					
				1 PLASTIC	—														X			
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NAOH														X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/18/12	0753	[signature]	[signature]	10/18/12	0753
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-0217
email or Fax#: SCOTT CROUCH - RPS
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SWMU No. 14
Project #:
Project Manager: SCOTT CROUCH-RPS
Sampler: TRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210860	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) + TPH GRO	8270 (Semi-VOA)	TPH MRO & DRO	METALS			Air Bubbles (Y or N)
10/16/12	0900	GW	SWMU 14 -	6 VOA	HCL & NEAT	-004										X						
			ORP19-1GW	1 AMBER	—												X					
				1 PLASTIC	—														X			
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
	1720	W	EB101612	6 VOA	HCL & NEAT	-005										X						
				1 AMBER	—												X					
				1 PLASTIC	—														X			
				1 PLASTIC	HNO_3														X			
				1 PLASTIC	NaOH														X			
10/16/12	—	W	TRIP BLANK	3 VOA	HCL	-006										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/17/12	0820	[signature]	[signature]	10/18/12	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Appendix F

Quality Assurance/Quality Control Review

Data Usability Summary
Western Refining Company

Data Validation Introduction: This summary presents data verification results for soil and water samples collected from the Gallup Refinery Solid Waste Management Units (SWMUs) 1 and 14. The data review was performed in accordance with the requirements of the US EPA *Functional Guidelines for Organic and Inorganic Data Review* and adherence to project objectives and quality assurance and control parameters set by the project laboratory Hall Environmental Analysis Laboratory, Inc.

Consistent with project objectives this sampling and analysis event provides current data on concentrations of chemicals of concern (COCs) in soil and ground water at the SWMUs.

A total of 234 samples were collected in July and October 2012 using standard procedures for the industry. Soil and water samples were submitted to Hall Environmental Analysis Laboratory, including quality assurance samples consisting of fourteen Equipment Blanks, ten Trip Blanks, four Field Blanks and five Methanol Blanks. Table 1 presents a summary of the field and laboratory sample identifications and sample media.

Water analytical results for the listed samples are reported on milligram per liter basis; soil on a milligram per kilogram basis. Non-detected results are reported as less than the value of the sample detection limit (SDL) with method quantitation limit data meeting acceptance limits.

All anomalies were noted in the quality control (QC) data associated with each data package.

Analyses requested included:

- Volatile organic compounds (VOCs) by USEPA Method 8260B;
- Semi-volatile organic compounds (SVOCs) by USEPA Method 8270C;
- Gasoline, diesel and motor oil range organics by SW-846 Method 8015B;
- Total recoverable metals by SW-846 Method 6010/6020;
- Cyanide by SW-846 Method 9012; and
- Mercury by USEPA Method 7470.

Quality Control Parameters Reviewed: The following QC parameters were examined:

- Chain-of-Custody (C-O-C);
- Sample preservation and temperature upon laboratory receipt;
- Holding times;
- Blank contamination (method, equipment, trip and field blanks);
- Surrogate Recovery (for organic parameters);
- Laboratory Control Sample (LCS) recovery and Relative Percent Difference (RPD);
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recovery and RPD;
- Duplicates (field and laboratory duplicates); and
- Other applicable QC parameters.

Data qualifiers used to qualify the analytical results associated with QC parameters outside of established data quality objectives are defined below.

- JH – The analyte was positively identified, however the result should be considered an estimate with a potential high bias.

- JL – The analyte was positively identified, however the result should be considered an estimate with a potential low bias.

- UJ – The reporting limit should be considered an estimated value.

- R – Quality control indicates that the data is not usable.

Results for the sampling event that required qualification based on this DUS are summarized in Table 2. Results qualified as “JH,” “JL” or “UJ” are of acceptable quality and may be used quantitatively to fulfill project objectives. However, results qualified as “R” should be rejected and not used for this project.

Chain-of-Custody: The C-O-C documentation associated with project samples was found to be complete. C-O-Cs included sample identification, date and time of collection, requested parameters and relinquished/received signatures. All samples were received in the appropriate containers in good condition and met the laboratory’s acceptance criteria. All sample numbers (field identification) on the C-O-C were cross-referenced to laboratory ID numbers and corresponding QC data. The laboratory correctly conducted analyses listed on the C-O-C

Sample Preservation and Temperature Upon Laboratory Receipt: Samples collected were received preserved and intact by Hall Environmental Laboratories, Inc. A few of the aqueous samples intended for metal analyses required additional preservation upon receipt. This extra step in the laboratory necessitated the qualification of some results as shown in Table 2. Data qualification for temperature was not required as samples were received at a temperature of 6.0 degrees Celsius or lower.

Holding Times: No data qualification for holding times was required as samples were extracted and analyzed within method-specified holding times.

Method Blanks: According to the LRCs and QC data summaries, method blanks were analyzed at the appropriate frequency. The few instances in which target compounds were detected in method blanks, the laboratory re-analyzed the sample with another batch. Therefore, no qualification was required for method blank contamination.

Trip Blanks: Trip blanks were analyzed as appropriate. Qualification was unnecessary as target organic compounds were not detected in the trip blank samples.

Field/Equipment Blanks: Field and equipment blanks were analyzed as appropriate. Qualification was unnecessary as target organic compounds were not detected in those samples.

Methanol Blanks: Methanol blanks were analyzed for VOCs. No analytes were detected in the methanol blanks above the respective laboratory reporting limits.

Surrogate Recovery: Surrogate recoveries for organic and inorganic analyses were performed at the required frequency and were within the acceptable ranges with a few exceptions. None of the exceptions required qualification, indicating that the method was in control and the data not adversely affected.

Laboratory Control Samples (LCS): LCS/LCS duplicates were performed at the required frequency and were within acceptance limits for percent recovery and reproducibility with the following exceptions.

- The LCS percent recovery for Trichloroethene (TCE) associated with eight samples was above acceptable limits. As TCE was not detected in those samples, no qualification was necessary.

- The reproducibility for 4-Nitrophenol and Pentachlorophenol associated with three samples were above acceptable limits. As neither compound was detected in those samples, no qualification was necessary.

- The LCS percent recovery for N-NItrosodi-n-propylamine associated with twenty samples was above acceptable limits. As the compound was not detected in those samples, no qualification was necessary.

- The LCS percent recovery for Selenium associated with eight samples was above acceptable limits. As the compound was not detected in those samples, no qualification was necessary.

Based on the LRCs, initial calibration and continuing calibration data met method requirements. Additionally, internal standards, analytical duplicate data and interference check standards were acceptable.

Matrix Spike (MS)/Matrix Spike Duplicate (MSD): MS/MSD samples were performed at the required frequency and MS/MSD percent recoveries and reproducibility were within acceptable limits except for the following:

- SWMU 1-1. MS recoveries for Acenapthene and Pyrene were low; N-Nitrosodi-n-propylamine and 4-Nitrophenol were unacceptably low.

- SWMU 1-5. MS recoveries for Antimony and Selenium were unacceptably low.

- SWMU 1-13. MS recovery for Diesel Range Organics was low.

- SWMU 1-17. MS recovery for Selenium was low; Antimony unacceptably low.

- SWMU 1-24. MS recovery for Antimony was unacceptably low. Selenium reproducibility was above acceptable limits but no additional qualification was required.

- SWMU 1-28. MS recovery for Antimony was low.

- SWMU 1-37. MS recovery for Diesel Range Organics was low.

- SWMU 14-2. MS recoveries for Antimony, Selenium, Vanadium and Zinc were low.

- SWMU 14-6. MS recovery for Gasoline Range Organics was low. Selenium, 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene, N-Nitrosodi-n-propylamine and Gasoline Range Organics reproducibilities were above acceptable limits but no additional qualification was required.

- SWMU 14-7. MS recovery for Antimony was high. N-Nitrosodi-n-propylamine reproducibility was unacceptable but no additional qualification was required.

- SWMU 14-10. MS recovery for Mercury was high.

- SWMU 14-19. MS recoveries for Antimony and Selenium were low. Antimony reproducibility was unacceptable but no additional qualification was required.

- SWMU 14-22. MS recoveries for Antimony, Chromium, Selenium and Zinc were low.

- SWMU 14-23. MS recoveries for Cobalt, Lead, Nickel and Selenium were low. Antimony reproducibility was above acceptable limits but no additional qualification was required.

These results are listed with the appropriate qualification in Table 2.

Field Precision – Field Duplicate Data: Field duplicate precision calculations were performed for sixteen duplicate sample sets. Precision was not calculated for an individual analyte if not detected in both the sample and duplicate. When not detected in either the sample or the duplicate, the analyte RDL was used as the concentration in the non-detected sample (Table 3). A field duplicate precision of 20% target determined the qualification shown in Table 3. Although a smaller actual difference between sample/duplicate results indicates a reduced chance of problems with reported results, all “J” qualified results should be viewed as estimates.

Summary: Qualified results are listed in Table 2. The analytical data are usable for the purpose of determining COC concentrations with the exception of the Antimony, Selenium, 4-Nitrophenol and N-Nitrosodi–n-propylamine results requiring “R” qualification. All rejections were required by very low MS recovery of non-detect compounds, but this only occurred in a small number of samples.

Table 1. Cross Reference List - Field and Laboratory ID Numbers

Lab ID	Field ID	Date Sampled	Media
1210372-001	SWMU 1-1 (2-4')	10/5/2012	Soil
1210372-002	SWMU 1-1 (10-12')	10/5/2012	Soil
1210372-003	SWMU 1-1 (13-14')	10/5/2012	Soil
1210372-004	SWMU 1-8 (16-18')	10/5/2012	Soil
1210372-005	SWMU 1-8 (19-20')	10/5/2012	Soil
1210372-006	SWMU 1-8 (4-6')	10/5/2012	Soil
1210372-007	SWMU 1-8 (10-12')	10/5/2012	Soil
1210372-008	SWMU 1-8 (12-14')	10/5/2012	Soil
1210372-009	SWMU 1-8 (16-18')	10/5/2012	Soil
1210372-010	EB100512	10/5/2012	Water
1210372-011	Trip Blank		Water
1210372-012	SWMU 1-4 GW	10/5/2012	Water
1210372-013	SWMU 1-5 GW	10/5/2012	Water
1210372-014	SWMU 1-8 GW	10/5/2012	Water
1210372-015	SWMU 1-7 (16-18')	10/4/2012	Soil
1210372-016	SWMU 1-6 (10-11')	10/4/2012	Soil
1210372-017	SWMU 1-6 (11-12')	10/4/2012	Soil
1210372-018	SWMU 1-7 (12-14')	10/4/2012	Soil
1210372-019	SWMU 1-7 (14-16')	10/4/2012	Soil
1210372-020	SWMU 1-6 (2-4')	10/4/2012	Soil
1210372-021	SWMU 1-6 (2-4') DUP	10/4/2012	Soil
1210372-022	SWMU 1-6 (4-6')	10/4/2012	Soil
1210372-023	SWMU 1-6 (7.5-8')	10/4/2012	Soil
1210372-024	EB100412	10/4/2012	Water
1210372-025	Trip Blank		Water
1210372-026	SWMU 1-4 GW	10/4/2012	Water
1210372-027	SWMU 1-6 GW	10/4/2012	Water
1210372-028	SWMU 1-7 GW	10/4/2012	Water
1210332-001	SWMU 1-4 (10-12') DUP	10/3/2012	Soil
1210332-002	SWMU 1-4 (17-18')	10/3/2012	Soil
1210332-003	SWMU 1-4 (23-24')	10/3/2012	Soil
1210332-004	Trip Blank		Water
1210332-005	SWMU 1-3 GW	10/3/2012	Water
1210332-006	SWMU 1-4 (8-10')	10/3/2012	Soil
1210332-007	SWMU 1-4 (10-12')	10/3/2012	Soil
1210332-008	SWMU 1-5 (26-27')	10/3/2012	Soil
1210332-009	SWMU 1-5 (27-28')	10/3/2012	Soil
1210332-010	EB100312	10/3/2012	Water
1210332-011	MeOH Blank 100312	10/3/2012	MEOH BLAN
1210332-012	SWMU 1-5 (10-12')	10/3/2012	Soil
1210332-013	SWMU 1-5 (14-16')	10/3/2012	Soil
1210332-014	SWMU 1-5 (16-18')	10/3/2012	Soil
1210332-015	SWMU 1-5 (24-25')	10/3/2012	Soil
1210279-001	SWMU 1-2 (6-8')	10/2/2012	Soil
1210279-002	SWMU 1-2 (10-11')	10/2/2012	Soil
1210279-003	SWMU 1-2 (14-16')	10/2/2012	Soil
1210279-004	SWMU 1-2 (17-17.25')	10/2/2012	Soil
1210279-005	SWMU 1-2 (19.5-20')	10/2/2012	Soil
1210279-006	SWMU 1-2 GW	10/2/2012	Water
1210279-007	Trip Blank		Water
1210279-008	SWMU 1-3 (2-4')	10/2/2012	Soil
1210279-009	SWMU 1-3 (10-11')	10/2/2012	Soil

Table 1. Cross Reference List - Field and Laboratory ID Numbers

Lab ID	Field ID	Date Sampled	Media
1210279-010	SWMU 1-3 (11-11.25')	10/2/2012	Soil
1210279-011	SWMU 1-3 (18.5-19.5')	10/2/2012	Soil
1210279-012	SWMU 1-3 (19.5-20')	10/2/2012	Soil
1210279-013	EB100212	10/2/2012	Water
1210521-001	SWMU 1-24 (0-0.5')	10/8/2012	Soil
1210521-002	SWMU 1-24 (0-0.5') DUP	10/8/2012	Soil
1210521-003	SWMU 1-24 (1.5-2')	10/8/2012	Soil
1210521-004	SWMU 1-24 (10.5-11.5')	10/8/2012	Soil
1210521-005	SWMU 1-24 (16-18')	10/8/2012	Soil
1210521-006	SWMU 1-24 (24-26')	10/8/2012	Soil
1210521-007	SWMU 1-24 (32-34')	10/8/2012	Soil
1210521-008	MeOH Blank	10/8/2012	MEOH (SOIL)
1210653-001	SWMU 1-37 (0-0.5')	10/10/2012	Soil
1210653-002	SWMU 1-37 (1.5-2')	10/10/2012	Soil
1210653-003	SWMU 1-37 (8-8.5')	10/10/2012	Soil
1210653-004	SWMU 1-37 (8.5-9')	10/10/2012	Soil
1210653-005	SWMU 1-37 (12-13')	10/10/2012	Soil
1210653-006	SWMU 1-37 (13-14')	10/10/2012	Soil
1210653-007	SWMU 1-37 (17-18')	10/10/2012	Soil
1210660-001	SWMU 1-24 GW	10/10/2012	Water
1210660-002	SWMU 1-24 GW DUP	10/10/2012	Water
1210660-003	Trip Blank		Water
1210660-004	EB101012	10/10/2012	Water
1210692-001	SWMU 1-20 (0-0.5')	10/11/2012	Soil
1210692-002	SWMU 1-20 (0-0.5') DUP	10/11/2012	Soil
1210692-003	SWMU 1-20 (1.5-2')	10/11/2012	Soil
1210692-004	SWMU 1-20 (4-6')	10/11/2012	Soil
1210692-005	SWMU 1-20 (10-12')	10/11/2012	Soil
1210692-006	SWMU 1-38 (0-0.5')	10/11/2012	Soil
1210692-007	SWMU 1-38 (1.5-2')	10/11/2012	Soil
1210692-008	SWMU 1-38 (6-8')	10/11/2012	Soil
1210692-009	SWMU 1-27 (0-0.5')	10/12/2012	Soil
1210692-010	SWMU 1-27 (1.5-2')	10/12/2012	Soil
1210692-011	SWMU 1-28 (0-0.5')	10/12/2012	Soil
1210692-012	SWMU 1-28 (1.5-2')	10/12/2012	Soil
1210692-013	SWMU 1-28 (1.5-2') DUP	10/12/2012	Soil
1210692-014	SWMU 1-30 (0-0.5')	10/12/2012	Soil
1210692-015	SWMU 1-30 (1.5-2')	10/12/2012	Soil
1210692-016	SWMU 1-30 (4-6')	10/12/2012	Soil
1210692-017	SWMU 1-35 (0-0.5')	10/12/2012	Soil
1210692-018	SWMU 1-35 (1.5-2')	10/12/2012	Soil
1210692-019	SWMU 1-35 (4-6')	10/12/2012	Soil
1210692-020	MeOH Blank	10/12/2012	MEOH (SOIL)
1210692-021	SWMU 1-13 (0-0.5')	10/12/2012	Soil
1210692-022	SWMU 1-13 (1.5-2')	10/12/2012	Soil
1210692-023	SWMU 1-13 (2-4')	10/12/2012	Soil
1210692-024	SWMU 1-13 (4-6')	10/12/2012	Soil
1210692-025	SWMU 1-13 (4-6') DUP	10/12/2012	Soil
1210692-026	SWMU 1-37 GW	10/11/2012	Water
1210692-027	EB101112	10/11/2012	Water
1210692-028	EB101212	10/12/2012	Water
1210692-029	Trip Blank		Water

Table 1. Cross Reference List - Field and Laboratory ID Numbers

Lab ID	Field ID	Date Sampled	Media
1210811-001	SWMU 1-9 (0-0.5')	10/15/2012	Soil
1210811-002	SWMU 1-9 (1.5-2')	10/15/2012	Soil
1210811-003	SWMU 1-10 (0-0.5')	10/15/2012	Soil
1210811-004	SWMU 1-10 (1.5-2')	10/15/2012	Soil
1210811-005	SWMU 1-11 (0-0.5')	10/15/2012	Soil
1210811-006	SWMU 1-11 (1.5-2')	10/15/2012	Soil
1210811-007	SWMU 1-12 (0-0.5')	10/15/2012	Soil
1210811-008	SWMU 1-12 (0.5-1')	10/15/2012	Soil
1210811-009	SWMU 1-14 (0-0.5')	10/15/2012	Soil
1210811-010	SWMU 1-14 (1.5-2')	10/15/2012	Soil
1210811-011	SWMU 1-14 (1.5-2') DUP	10/15/2012	Soil
1210811-012	SWMU 1-15 (0-0.5')	10/15/2012	Soil
1210811-013	SWMU 1-15 (1.5-2')	10/15/2012	Soil
1210811-014	SWMU 1-16 (0-0.5')	10/15/2012	Soil
1210811-015	SWMU 1-16 (1.5-2')	10/15/2012	Soil
1210811-016	SWMU 1-17 (0-0.5')	10/15/2012	Soil
1210811-017	SWMU 1-17 (1-1.5')	10/15/2012	Soil
1210811-018	EB101512	10/15/2012	Water
1210856-001	SWMU 1-31 (0-0.5')	10/16/2012	Soil
1210856-002	SWMU 1-32 (0-0.5')	10/16/2012	Soil
1210856-003	SWMU 1-32 (0-0.5') DUP	10/16/2012	Soil
1210856-004	SWMU 1-33 (0-0.5')	10/16/2012	Soil
1210856-005	SWMU 1-34 (0-0.5')	10/16/2012	Soil
1210856-006	SWMU 1-36 (0-0.5')	10/16/2012	Soil
1210858-001	SWMU 1-18 (0-0.5')	10/16/2012	Soil
1210858-002	SWMU 1-18 (1-1.5')	10/16/2012	Soil
1210858-003	SWMU 1-19 (0-0.5')	10/16/2012	Soil
1210858-004	SWMU 1-21 (0-0.5')	10/16/2012	Soil
1210858-005	SWMU 1-21 (0-0.5') DUP	10/16/2012	Soil
1210858-006	SWMU 1-22 (0-0.5')	10/16/2012	Soil
1210858-007	SWMU 1-22 (1.5-2')	10/16/2012	Soil
1210858-008	MeOH Blank	10/16/2012	MEOH (SOIL)
1210859-001	SWMU 1-23 (0-0.5')	10/16/2012	Soil
1210859-002	SWMU 1-39 (0-0.5')	10/16/2012	Soil
1210859-003	SWMU 1-25 (0-0.5')	10/16/2012	Soil
1210859-004	SWMU 1-25 (0.5-1')	10/16/2012	Soil
1210859-005	SWMU 1-26 (0-0.5')	10/16/2012	Soil
1210859-006	SWMU 1-29 (0-0.5')	10/16/2012	Soil
1207748-001	SWMU 14-1 (0-0.5')	7/16/2012	Soil
1207748-002	SWMU 14-1 (1.5-2')	7/16/2012	Soil
1207748-003	SWMU 14-1 (10-12')	7/16/2012	Soil
1207900-001	SWMU 14-3 (0-0.5')	7/18/2012	Soil
1207900-002	SWMU 14-3 (1.5-2')	7/18/2012	Soil
1207900-003	SWMU 14-3 (8-10')	7/18/2012	Soil
1207900-004	SWMU 14-3 (12-14')	7/18/2012	Soil
1207900-005	SWMU 14-3 (22.5-26')	7/18/2012	Soil
1207900-006	SWMU 14-1 (48-50')	7/18/2012	Soil
1207900-007	SWMU 14-3 GW	7/18/2012	Water
1207900-008	FB071812	7/18/2012	Water
1207900-009	Trip Blank		Water
1207917-001	SWMU 14-4 (0-0.5')	7/17/2012	Soil
1207917-002	SWMU 14-4 (1.5-2')	7/17/2012	Soil

Table 1. Cross Reference List - Field and Laboratory ID Numbers

Lab ID	Field ID	Date Sampled	Media
1207917-003	SWMU 14-4 (10-12')	7/17/2012	Soil
1207917-004	SWMU 14-4 (19.5-20')	7/17/2012	Soil
1207917-005	SWMU 14-2 (0-0.5')	7/17/2012	Soil
1207917-006	SWMU 14-2 (1.5-2')	7/17/2012	Soil
1207917-007	SWMU 14-2 (8-10')	7/17/2012	Soil
1207917-008	SWMU 14-2 (8-10') DUP	7/17/2012	Soil
1207917-009	SWMU 14-2 (16-18')	7/17/2012	Soil
1207917-010	SWMU 14-2 (24-25')	7/17/2012	Soil
1207917-011	FB071712	7/17/2012	Water
1207917-012	EB071712	7/17/2012	Water
1207917-013	Trip Blank		Water
1207922-001	SWMU 14-9 (0-0.5')	7/18/2012	Soil
1207922-002	SWMU 14-9 (0-0.5') DUP	7/18/2012	Soil
1207922-003	SWMU 14-9 (1.5-2')	7/18/2012	Soil
1207922-004	SWMU 14-9 (4-6')	7/18/2012	Soil
1207922-005	SWMU 14-9 (13-14')	7/18/2012	Soil
1207922-006	SWMU 14-7 (0-0.5')	7/18/2012	Soil
1207922-007	SWMU 14-7 (1.5-2')	7/18/2012	Soil
1207922-008	SWMU 14-7 (6-8')	7/18/2012	Soil
1207922-009	SWMU 14-7 (23.5-24')	7/18/2012	Soil
1207922-010	EB071812	7/18/2012	Water
1210860-001	SWMU 14-24 (0-0.5')	10/17/2012	Soil
1210860-002	SWMU 14-24 (1.5-2')	10/17/2012	Soil
1210860-003	EB101712	10/17/2012	Water
1210860-004	SWMU 14-OAPIS-1GW	10/16/2012	Water
1210860-005	EB101612	10/16/2012	Water
1210860-006	Trip Blank		Water
1210656-001	SWMU 14-23 (0-0.5')	10/10/2012	Soil
1210656-002	SWMU 14-23 (1.5-2')	10/10/2012	Soil
1210656-003	SWMU 14-23 (12-14')	10/10/2012	Soil
1210656-004	SWMU 14-23 (14-16')	10/10/2012	Soil
1210585-001	EB100912	10/9/2012	Water
1210585-002	FB100912	10/9/2012	Water
1210583-001	SWMU 14-22 (0-0.5')	10/9/2012	Soil
1210583-002	SWMU 14-22 (1.5-2')	10/9/2012	Soil
1210583-003	SWMU 14-22 (4-6')	10/9/2012	Soil
1210583-004	SWMU 14-22 (4-6') DUP	10/9/2012	Soil
1210583-005	SWMU 14-22 (8-10')	10/9/2012	Soil
1210582-001	SWMU 14-6 (0-0.5')	10/9/2012	Soil
1210582-002	SWMU 14-6 (1.5-2')	10/9/2012	Soil
1210582-003	SWMU 14-6 (10-12')	10/9/2012	Soil
1210582-004	SWMU 14-6 (17-18')	10/9/2012	Soil
1210582-005	SWMU 14-21 (0-0.5')	10/9/2012	Soil
1210582-006	SWMU 14-21 (1.5-2')	10/9/2012	Soil
1210582-007	SWMU 14-21 (8-10')	10/9/2012	Soil
1207940-001	SWMU 14-10 (0-0.5')	7/19/2012	Soil
1207940-002	SWMU 14-10 (1.5-2')	7/19/2012	Soil
1207940-003	SWMU 14-8 (0-0.5')	7/19/2012	Soil
1207940-004	SWMU 14-8 (1.5-2')	7/19/2012	Soil
1207940-005	SWMU 14-8 (1.5-2') DUP	7/19/2012	Soil
1207940-006	SWMU 14-12 (0-0.5')	7/19/2012	Soil
1207940-007	SWMU 14-12 (1.5-2')	7/19/2012	Soil

Table 1. Cross Reference List - Field and Laboratory ID Numbers

Lab ID	Field ID	Date Sampled	Media
1207940-008	SWMU 14-13 (0-0.5')	7/19/2012	Soil
1207940-009	SWMU 14-13 (1.5-2')	7/19/2012	Soil
1207940-010	SWMU 14-14 (0-0.5')	7/19/2012	Soil
1207940-011	SWMU 14-14 (1.5-2')	7/19/2012	Soil
1207940-012	SWMU 14-11 (0-0.5')	7/19/2012	Soil
1207940-013	SWMU 14-11 (1.5-2')	7/19/2012	Soil
1207940-014	SWMU 14-18 (0-0.5')	7/19/2012	Soil
1207940-015	SWMU 14-18 (1.5-2')	7/19/2012	Soil
1207940-016	SWMU 14-5 (0-0.5')	7/19/2012	Soil
1207940-017	SWMU 14-5 (0-0.5') DUP	7/19/2012	Soil
1207940-018	SWMU 14-5 (1.5-2')	7/19/2012	Soil
1207940-019	SWMU 14-19 (0-0.5')	7/19/2012	Soil
1207940-020	SWMU 14-19 (1.5-2')	7/19/2012	Soil
1207940-021	SWMU 14-17 (0-0.5')	7/19/2012	Soil
1207940-022	SWMU 14-17 (1.5-2')	7/19/2012	Soil
1207940-023	SWMU 14-16 (0-0.5')	7/19/2012	Soil
1207940-024	SWMU 14-16 (1.5-2')	7/19/2012	Soil
1207940-025	SWMU 14-15 (0-0.5')	7/19/2012	Soil
1207940-026	SWMU 14-15 (1.5-2')	7/19/2012	Soil
1207940-027	SWMU 14-20 (0-0.5')	7/19/2012	Soil
1207940-028	SWMU 14-20 (0-0.5') DUP	7/19/2012	Soil
1207940-029	SWMU 14-2 GW	7/19/2012	Water
1207940-030	FB071912	7/19/2012	Water
1207940-031	EB071912	7/19/2012	Water
1207940-032	Trip Blank		Water
1207940-033	MEOH Blank	7/19/2012	MEOH BLAN

Table 2. TRRP Data Qualification

Analyte	Sample ID	Lab ID	Method	Sample Date	Result	Units	Qualifier
4-Nitrophenol	SWMU 1-1 (2-4')	1210372-001	8270C	10/5/12	<1.2538	mg/kg	R
N-Nitrosodi-n-propylamine	SWMU 1-1 (2-4')	1210372-001	8270C	10/5/12	<1.003	mg/kg	R
Pyrene	SWMU 1-1 (2-4')	1210372-001	8270C	10/5/12	1.5	mg/kg	JL
4-Nitrophenol	SWMU 1-1 (10-12')	1210372-002	8270C	10/5/12	<0.251	mg/kg	R
N-Nitrosodi-n-propylamine	SWMU 1-1 (10-12')	1210372-002	8270C	10/5/12	<0.2008	mg/kg	R
Pyrene	SWMU 1-1 (10-12')	1210372-002	8270C	10/5/12	<0.2008	mg/kg	UJ
4-Nitrophenol	SWMU 1-1 (13-14')	1210372-003	8270C	10/5/12	<0.2484	mg/kg	R
N-Nitrosodi-n-propylamine	SWMU 1-1 (13-14')	1210372-003	8270C	10/5/12	<0.1987	mg/kg	R
Pyrene	SWMU 1-1 (13-14')	1210372-003	8270C	10/5/12	<0.1987	mg/kg	UJ
Antimony	SWMU 1-5 (10-12')	1210332-012	6010/6020	10/3/12	<12.5	mg/kg	R
Selenium	SWMU 1-5 (10-12')	1210332-012	6010/6020	10/3/12	<12.5	mg/kg	R
Antimony	SWMU 1-5 (14-16')	1210332-013	6010/6020	10/3/12	<12.5	mg/kg	R
Selenium	SWMU 1-5 (14-16')	1210332-013	6010/6020	10/3/12	<12.5	mg/kg	R
Antimony	SWMU 1-5 (16-18')	1210332-014	6010/6020	10/3/12	<12.5	mg/kg	R
Selenium	SWMU 1-5 (16-18')	1210332-014	6010/6020	10/3/12	<12.5	mg/kg	R
Pyrene	SWMU 1-5 (16-18')	1210332-014	8270C	10/3/12	<0.1993	mg/kg	UJ
Antimony	SWMU 1-5 (24-25')	1210332-015	6010/6020	10/3/12	<12.5	mg/kg	R
Selenium	SWMU 1-5 (24-25')	1210332-015	6010/6020	10/3/12	<12.5	mg/kg	R
Antimony	SWMU 1-5 (26-27')	1210332-008	6010/6020	10/3/12	<2.5	mg/kg	R
Selenium	SWMU 1-5 (26-27')	1210332-008	6010/6020	10/3/12	<2.5	mg/kg	R
Antimony	SWMU 1-5 (27-28')	1210332-009	6010/6020	10/3/12	<12.5	mg/kg	R
Selenium	SWMU 1-5 (27-28')	1210332-009	6010/6020	10/3/12	<12.5	mg/kg	R
Antimony	SWMU 1-13 (1.5-2')	1210692-022	6010/6020	10/12/2012	<5.0004	mg/kg	UJL
Antimony	SWMU 1-13 (2-4')	1210692-023	6010/6020	10/12/2012	<4.9999	mg/kg	UJL
Antimony	SWMU 1-13 (4-6')	1210692-024	6010/6020	10/12/2012	<4.9997	mg/kg	UJL
Antimony	SWMU 1-13 (4-6') DUP	1210692-024	6010/6020	10/12/2012	<5	mg/kg	UJL
Antimony	SWMU 1-17 (0-0.5')	1210811-016	6010/6020	10/15/2012	<5	mg/kg	R
Selenium	SWMU 1-17 (0-0.5')	1210811-016	6010/6020	10/15/2012	<5	mg/kg	UJL
Antimony	SWMU 1-17 (1-1.5')	1210811-017	6010/6020	10/15/2012	<5	mg/kg	R
Selenium	SWMU 1-17 (1-1.5')	1210811-017	6010/6020	10/15/2012	<5	mg/kg	UJL
Antimony	SWMU 1-20 (0-0.5') DUP	1210692-002	6010/6020	10/11/2012	<12.5	mg/kg	UJL
Antimony	SWMU 1-20 (1.5-2')	1210692-003	6010/6020	10/11/2012	<12.5002	mg/kg	UJL
Antimony	SWMU 1-24 (24-26')	1210521-006	6010/6020	10/8/2012	<12.5	mg/kg	R
Antimony	SWMU 1-24 (32-34')	1210521-007	6010/6020	10/8/2012	<12.5	mg/kg	R
Antimony	SWMU 1-27 (1.5-2')	1210692-010	6010/6020	10/12/2012	<12.5004	mg/kg	UJL
Antimony	SWMU 1-28 (0-0.5')	1210692-011	6010/6020	10/12/2012	<5	mg/kg	UJL
Antimony	SWMU 1-28 (1.5-2')	1210692-012	6010/6020	10/12/2012	<5	mg/kg	UJL
Diesel Range Organics (DRO)	SWMU 1-28 (1.5-2')	1210692-012	6010/6020	10/12/2012	<10.0301	mg/kg	UJ
Antimony	SWMU 1-28 (1.5-2') DUP	1210692-013	6010/6020	10/12/2012	<12.4997	mg/kg	UJL
Diesel Range Organics (DRO)	SWMU 1-28 (1.5-2') DUP	1210692-013	6010/6020	10/12/2012	<9.9305	mg/kg	UJ
Antimony	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	<0.0125	mg/l	UJL
Arsenic	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	0.063	mg/l	JL
Barium	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	56	mg/l	JL
Beryllium	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	0.21	mg/l	JL
Cadmium	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	<0.05	mg/l	UJL
Chromium	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	0.31	mg/l	JL
Cobalt	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	0.53	mg/l	JL
Cyanide	SWMU 1-2 GW	1210279-006	9012	10/2/2012	0.037	mg/l	JL
Iron	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	140	mg/l	JL
Lead	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	1.7	mg/l	JL
Manganese	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	95	mg/l	JL
Mercury	SWMU 1-2 GW	1210279-006	7470	10/2/2012	0.00027	mg/l	JL

Table 2. TRRP Data Qualification

Analyte	Sample ID	Lab ID	Method	Sample Date	Result	Units	Qualifier
Nickel	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	0.95	mg/l	JL
Selenium	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	0.059	mg/l	JL
Silver	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	<0.125	mg/l	UJL
Vanadium	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	<1.25	mg/l	UJL
Zinc	SWMU 1-2 GW	1210279-006	6010/6020	10/2/2012	1.1	mg/l	JL
Antimony	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	<0.0025	mg/l	UJL
Arsenic	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.015	mg/l	JL
Barium	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.54	mg/l	JL
Beryllium	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.0066	mg/l	JL
Cadmium	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	<0.002	mg/l	UJL
Chromium	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.015	mg/l	JL
Cobalt	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.043	mg/l	JL
Cyanide	SWMU 1-3 GW	1210332-005	9012	10/3/2012	0.032	mg/l	JL
Iron	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	20	mg/l	JL
Lead	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.057	mg/l	JL
Manganese	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	2.1	mg/l	JL
Mercury	SWMU 1-3 GW	1210332-005	7470	10/3/2012	<0.0002	mg/l	UJL
Nickel	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.35	mg/l	JL
Selenium	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.0097	mg/l	JL
Silver	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	<0.005	mg/l	UJL
Vanadium	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	<0.05	mg/l	UJL
Zinc	SWMU 1-3 GW	1210332-005	6010/6020	10/3/2012	0.068	mg/l	JL
Antimony	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	<0.005	mg/l	UJL
Arsenic	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	0.054	mg/l	JL
Barium	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	3.4	mg/l	JL
Beryllium	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	0.041	mg/l	JL
Cadmium	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	<0.02	mg/l	UJL
Chromium	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	0.16	mg/l	JL
Cobalt	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	0.27	mg/l	JL
Cyanide	SWMU 1-6 GW	1210372-027	9012	10/4/2012	0.028	mg/l	JL
Iron	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	94	mg/l	JL
Lead	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	0.29	mg/l	JL
Manganese	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	39	mg/l	JL
Mercury	SWMU 1-6 GW	1210372-027	7470	10/4/2012	0.00021	mg/l	UJL
Nickel	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	0.55	mg/l	JL
Selenium	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	0.024	mg/l	JL
Silver	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	<0.05	mg/l	UJL
Vanadium	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	<0.5	mg/l	UJL
Zinc	SWMU 1-6 GW	1210372-027	6010/6020	10/4/2012	0.88	mg/l	JL
Antimony	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	<0.005	mg/l	UJL
Arsenic	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	0.046	mg/l	JL
Barium	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	3.2	mg/l	JL
Beryllium	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	0.051	mg/l	JL
Cadmium	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	<0.02	mg/l	UJL
Chromium	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	0.17	mg/l	JL
Cobalt	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	0.16	mg/l	JL
Cyanide	SWMU 1-7 GW	1210372-028	9012	10/4/2012	0.052	mg/l	JL
Iron	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	130	mg/l	JL
Lead	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	0.34	mg/l	JL
Manganese	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	33	mg/l	JL
Mercury	SWMU 1-7 GW	1210372-028	7470	10/4/2012	0.00034	mg/l	UJL
Nickel	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	0.46	mg/l	JL
Selenium	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	0.022	mg/l	JL
Silver	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	<0.05	mg/l	UJL
Vanadium	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	<0.5	mg/l	UJL

Table 2. TRRP Data Qualification

Analyte	Sample ID	Lab ID	Method	Sample Date	Result	Units	Qualifier
Zinc	SWMU 1-7 GW	1210372-028	6010/6020	10/4/2012	0.42	mg/l	JL
Antimony	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	<0.005	mg/l	UJL
Arsenic	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	0.032	mg/l	JL
Barium	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	4.7	mg/l	JL
Beryllium	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	0.0065	mg/l	JL
Cadmium	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	<0.004	mg/l	UJL
Chromium	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	0.058	mg/l	JL
Cobalt	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	0.053	mg/l	JL
Cyanide	SWMU 1-8 GW	1210372-014	9012	10/5/2012	0.018	mg/l	JL
Iron	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	39	mg/l	JL
Lead	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	0.078	mg/l	JL
Manganese	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	7.9	mg/l	JL
Mercury	SWMU 1-8 GW	1210372-014	7470	10/5/2012	<0.0002	mg/l	UJL
Nickel	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	0.11	mg/l	JL
Selenium	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	0.0075	mg/l	JL
Silver	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	<0.01	mg/l	UJL
Vanadium	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	<0.1	mg/l	UJL
Zinc	SWMU 1-8 GW	1210372-014	6010/6020	10/5/2012	0.11	mg/l	JL
Antimony	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	<0.005	mg/l	UJL
Arsenic	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.052	mg/l	JL
Barium	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	17	mg/l	JL
Beryllium	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.032	mg/l	JL
Cadmium	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	<0.004	mg/l	UJL
Chromium	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.14	mg/l	JL
Cobalt	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.11	mg/l	JL
Cyanide	SWMU 1-24 GW	1210660-001	9012	10/10/2012	0.059	mg/l	JL
Iron	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	160	mg/l	JL
Lead	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.49	mg/l	JL
Manganese	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	43	mg/l	JL
Mercury	SWMU 1-24 GW	1210660-001	7470	10/10/2012	0.00022	mg/l	JL
Nickel	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.21	mg/l	JL
Selenium	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.023	mg/l	JL
Silver	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	<0.01	mg/l	UJL
Vanadium	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.2	mg/l	JL
Zinc	SWMU 1-24 GW	1210660-001	6010/6020	10/10/2012	0.27	mg/l	JL
Antimony	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	<0.005	mg/l	UJL
Arsenic	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.058	mg/l	JL
Barium	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	20	mg/l	JL
Beryllium	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.032	mg/l	JL
Cadmium	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	<0.004	mg/l	UJL
Chromium	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.16	mg/l	JL
Cobalt	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.11	mg/l	JL
Cyanide	SWMU 1-24 GW DUP	1210660-002	9012	10/10/2012	0.081	mg/l	JL
Iron	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	180	mg/l	JL
Lead	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.55	mg/l	JL
Manganese	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	39	mg/l	JL
Mercury	SWMU 1-24 GW DUP	1210660-002	7470	10/10/2012	0.00027	mg/l	JL
Nickel	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.21	mg/l	JL
Selenium	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.02	mg/l	JL
Silver	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	<0.01	mg/l	UJL
Vanadium	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.18	mg/l	JL
Zinc	SWMU 1-24 GW DUP	1210660-002	6010/6020	10/10/2012	0.28	mg/l	JL
Diesel Range Organics (DRO)	SWMU 1-37 GW	1210692-026	8015B	10/11/2012	1	mg/l	JL
Antimony	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	<0.0025	mg/l	UJL
Arsenic	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	0.024	mg/l	JL
Barium	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	2.8	mg/l	JL
Beryllium	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	0.042	mg/l	JL
Cadmium	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	<0.02	mg/l	UJL
Chromium	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	0.38	mg/l	JL
Cobalt	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	0.12	mg/l	JL
Iron	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	120	mg/l	JL

Table 2. TRRP Data Qualification

Analyte	Sample ID	Lab ID	Method	Sample Date	Result	Units	Qualifier
Lead	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	0.19	mg/l	JL
Manganese	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	45	mg/l	JL
Mercury	SWMU 14-3 GW	1207900-007	7470	7/18/2012	0.00011	mg/l	JL
Nickel	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	0.18	mg/l	JL
Selenium	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	0.0096	mg/l	JL
Silver	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	<0.05	mg/l	UJL
Vanadium	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	0.52	mg/l	JL
Zinc	SWMU 14-3 GW	1207900-007	6010/6020	7/18/2012	1.1	mg/l	JL
Chloride	SWMU 14-OAPIS-1GW	1210860-004		10/16/2012	<0.5	mg/l	UJL
Selenium	EB101612	1210860-005	6010/6020	10/16/2012	<0.001	mg/l	UJL
Chloride	EB101612	1210860-005		10/16/2012	1900	mg/l	JL
Fluoride	EB101612	1210860-005		10/16/2012	2.9	mg/l	JH
Sulfate	EB101612	1210860-005		10/16/2012	100	mg/l	JHE
Selenium	EB101712	1210860-003	6010/6020	10/17/2012	<0.001	mg/l	UJL
Chloride	EB101712	1210860-003		10/17/2012	<0.5	mg/l	UJL
Cyanide	SWMU 14-1 (48-50')	1207900-006	9012	7/18/2012	<0.5	mg/kg	UJL
Antimony	SWMU 14-2 (0-0.5')	1207917-005	6010/6020	7/17/2012	4	mg/kg	JL
Selenium	SWMU 14-2 (0-0.5')	1207917-005	6010/6020	7/17/2012	<12.5	mg/kg	UJL
Vanadium	SWMU 14-2 (0-0.5')	1207917-005	6010/6020	7/17/2012	31	mg/kg	JL
Zinc	SWMU 14-2 (0-0.5')	1207917-005	6010/6020	7/17/2012	17	mg/kg	JL
Antimony	SWMU 14-2 (1.5-2.0')	1207917-006	6010/6020	7/17/2012	3.6	mg/kg	JL
Selenium	SWMU 14-2 (1.5-2.0')	1207917-006	6010/6020	7/17/2012	<12.501	mg/kg	UJL
Vanadium	SWMU 14-2 (1.5-2.0')	1207917-006	6010/6020	7/17/2012	21	mg/kg	JL
Zinc	SWMU 14-2 (1.5-2.0')	1207917-006	6010/6020	7/17/2012	35	mg/kg	JL
Antimony	SWMU 14-2 (8-10')	1207917-007	6010/6020	7/17/2012	0.82	mg/kg	JL
Selenium	SWMU 14-2 (8-10')	1207917-007	6010/6020	7/17/2012	<2.5	mg/kg	UJL
Vanadium	SWMU 14-2 (8-10')	1207917-007	6010/6020	7/17/2012	20	mg/kg	JL
Zinc	SWMU 14-2 (8-10')	1207917-007	6010/6020	7/17/2012	37	mg/kg	JL
Antimony	SWMU 14-2 (8-10') Dup	1207917-008	6010/6020	7/17/2012	0.63	mg/kg	JL
Selenium	SWMU 14-2 (8-10') Dup	1207917-008	6010/6020	7/17/2012	<2.5	mg/kg	UJL
Vanadium	SWMU 14-2 (8-10') Dup	1207917-008	6010/6020	7/17/2012	23	mg/kg	JL
Zinc	SWMU 14-2 (8-10') Dup	1207917-008	6010/6020	7/17/2012	64	mg/kg	JL
Antimony	SWMU 14-2 (16-18')	1207917-009	6010/6020	7/17/2012	4.7	mg/kg	JL
Selenium	SWMU 14-2 (16-18')	1207917-009	6010/6020	7/17/2012	<12.5	mg/kg	UJL
Vanadium	SWMU 14-2 (16-18')	1207917-009	6010/6020	7/17/2012	22	mg/kg	JL
Zinc	SWMU 14-2 (16-18')	1207917-009	6010/6020	7/17/2012	26	mg/kg	JL
Antimony	SWMU 14-2 (24-25')	1207917-010	6010/6020	7/17/2012	3.3	mg/kg	JL
Selenium	SWMU 14-2 (24-25')	1207917-010	6010/6020	7/17/2012	<12.5	mg/kg	UJL
Vanadium	SWMU 14-2 (24-25')	1207917-010	6010/6020	7/17/2012	52	mg/kg	JL
Zinc	SWMU 14-2 (24-25')	1207917-010	6010/6020	7/17/2012	31	mg/kg	JL
Cyanide	SWMU 14-3 (8-10')	1207900-003	9012	7/18/2012	<0.5	mg/kg	UJL
Cyanide	SWMU 14-3 (25.5-26')	1207900-005	9012	7/18/2012	<0.5	mg/kg	UJL
2,4-Dinitrotoluene	SWMU 14-6 (0-0.5')	1210582-001	8270C	10/9/2012	<0.9987	mg/kg	UJ
Gasoline Range Organics (GRC	SWMU 14-6 (0-0.5')	1210582-001	8015B	10/9/2012	<5	mg/kg	UJ
2,4-Dinitrotoluene	SWMU 14-6 (1.5-2')	1210582-002	8270C	10/9/2012	<0.9924	mg/kg	UJ
Gasoline Range Organics (GRC	SWMU 14-6 (1.5-2')	1210582-002	8015B	10/9/2012	<5	mg/kg	UJ
2,4-Dinitrotoluene	SWMU 14-6 (10-12')	1210582-003	8270C	10/9/2012	<0.9901	mg/kg	UJ
Gasoline Range Organics (GRC	SWMU 14-6 (10-12')	1210582-003	8015B	10/9/2012	220	mg/kg	JL
2,4-Dinitrotoluene	SWMU 14-6 (17-18')	1210582-004	8270C	10/9/2012	<0.499	mg/kg	UJ
Gasoline Range Organics (GRC	SWMU 14-6 (17-18')	1210582-004	8015B	10/9/2012	<5	mg/kg	UJ
Antimony	SWMU 14-7 (0-0.5')	1207922-006	6010/6020	7/18/2012	5.3	mg/kg	JH
N-Nitrosodi-n-propylamine	SWMU 14-7 (0-0.5')	1207922-006	8270C	7/18/2012	<1.008	mg/kg	R
N-Nitrosodi-n-propylamine	SWMU 14-7 (1.5-2')	1207922-007	8270C	7/18/2012	<0.403	mg/kg	R
Antimony	SWMU 14-7 (6-8')	1207922-008	6010/6020	7/18/2012	4.5	mg/kg	JH
N-Nitrosodi-n-propylamine	SWMU 14-7 (6-8')	1207922-008	8270C	7/18/2012	<0.398	mg/kg	R
Antimony	SWMU 14-7 (23.5-24')	1207922-009	6010/6020	7/18/2012	4.6	mg/kg	JH
N-Nitrosodi-n-propylamine	SWMU 14-7 (23.5-24')	1207922-009	8270C	7/18/2012	<0.199	mg/kg	R
Mercury	SWMU 14-10 (0-0.5')	1207940-001	7470	7/19/2012	0.32	mg/kg	JH
Mercury	SWMU 14-10 (1.5-2.0')	1207940-002	7470	7/19/2012	0.21	mg/kg	JH
Antimony	SWMU 14-19 (0-0.5')	1207940-019	6010/6020	7/19/2012	<12.5	mg/kg	UJL
Selenium	SWMU 14-19 (0-0.5')	1207940-019	6010/6020	7/19/2012	<12.5	mg/kg	UJL

Table 2. TRRP Data Qualification

Analyte	Sample ID	Lab ID	Method	Sample Date	Result	Units	Qualifier
Antimony	SWMU 14-19 (1.5-2.0')	1207940-020	6010/6020	7/19/2012	<12.5	mg/kg	UJL
Selenium	SWMU 14-19 (1.5-2.0')	1207940-020	6010/6020	7/19/2012	<12.5	mg/kg	UJL
2,4-Dinitrotoluene	SWMU 14-21 (0-0.5')	1210582-005	8270C	10/9/2012	<0.499	mg/kg	UJ
2,4-Dinitrotoluene	SWMU 14-21 (1.5-2')	1210582-006	8270C	10/9/2012	<0.4988	mg/kg	UJ
2,6-Dinitrotoluene	SWMU 14-21 (8-10')	1210582-007	8270C	10/9/2012	<0.4957	mg/kg	UJ
Antimony	SWMU 14-22 (0-0.5')	1210583-001	6010/6020	10/9/2012	<12.5	mg/kg	UJL
Chromium	SWMU 14-22 (0-0.5')	1210583-001	6010/6020	10/9/2012	12	mg/kg	JL
Selenium	SWMU 14-22 (0-0.5')	1210583-001	6010/6020	10/9/2012	<12.5	mg/kg	UJL
2,4-Dinitrotoluene	SWMU 14-22 (0-0.5')	1210583-001	8270C	10/9/2012	<0.4987	mg/kg	UJ
Antimony	SWMU 14-22 (1.5-2')	1210583-002	6010/6020	10/9/2012	<5	mg/kg	UJL
Chromium	SWMU 14-22 (1.5-2')	1210583-002	6010/6020	10/9/2012	10	mg/kg	JL
Selenium	SWMU 14-22 (1.5-2')	1210583-002	6010/6020	10/9/2012	<5	mg/kg	UJL
2,4-Dinitrotoluene	SWMU 14-22 (1.5-2')	1210583-002	8270C	10/9/2012	<0.4944	mg/kg	UJ
Antimony	SWMU 14-22 (4-6')	1210583-003	6010/6020	10/9/2012	<5	mg/kg	UJL
Chromium	SWMU 14-22 (4-6')	1210583-003	6010/6020	10/9/2012	7.6	mg/kg	JL
Selenium	SWMU 14-22 (4-6')	1210583-003	6010/6020	10/9/2012	<5	mg/kg	UJL
2,4-Dinitrotoluene	SWMU 14-22 (4-6')	1210583-003	8270C	10/9/2012	<0.5045	mg/kg	UJ
Antimony	SWMU 14-22 (4-6') DUP	1210583-004	6010/6020	10/9/2012	<5	mg/kg	UJL
Chromium	SWMU 14-22 (4-6') DUP	1210583-004	6010/6020	10/9/2012	6.8	mg/kg	JL
Selenium	SWMU 14-22 (4-6') DUP	1210583-004	6010/6020	10/9/2012	<5	mg/kg	UJL
Antimony	SWMU 14-22 (8-10')	1210583-005	6010/6020	10/9/2012	<5	mg/kg	UJL
Chromium	SWMU 14-22 (8-10')	1210583-005	6010/6020	10/9/2012	9.3	mg/kg	JL
Selenium	SWMU 14-22 (8-10')	1210583-005	6010/6020	10/9/2012	<5	mg/kg	UJL
Antimony	SWMU 14-23 (0-0.5')	1210656-001	6010/6020	10/10/2012	<5	mg/kg	R
Cobalt	SWMU 14-23 (0-0.5')	1210656-001	6010/6020	10/10/2012	3.4	mg/kg	JL
Lead	SWMU 14-23 (0-0.5')	1210656-001	6010/6020	10/10/2012	4.2	mg/kg	JL
Nickel	SWMU 14-23 (0-0.5')	1210656-001	6010/6020	10/10/2012	5.9	mg/kg	JL
Selenium	SWMU 14-23 (0-0.5')	1210656-001	6010/6020	10/10/2012	<5	mg/kg	UJL
Diesel Range Organics (DRO)	SWMU 14-23 (0-0.5')	1210656-001	8015B	10/10/2012	45	mg/kg	JL
Antimony	SWMU 14-23 (1.5-2')	1210656-002	6010/6020	10/10/2012	<5	mg/kg	R
Cobalt	SWMU 14-23 (1.5-2')	1210656-002	6010/6020	10/10/2012	3.7	mg/kg	JL
Lead	SWMU 14-23 (1.5-2')	1210656-002	6010/6020	10/10/2012	7.6	mg/kg	JL
Nickel	SWMU 14-23 (1.5-2')	1210656-002	6010/6020	10/10/2012	6.5	mg/kg	JL
Selenium	SWMU 14-23 (1.5-2')	1210656-002	6010/6020	10/10/2012	<5	mg/kg	UJL
Diesel Range Organics (DRO)	SWMU 14-23 (1.5-2')	1210656-002	8015B	10/10/2012	32	mg/kg	JL
Antimony	SWMU 14-23 (12-14')	1210656-003	6010/6020	10/10/2012	<5	mg/kg	R
Cobalt	SWMU 14-23 (12-14')	1210656-003	6010/6020	10/10/2012	4	mg/kg	JL
Lead	SWMU 14-23 (12-14')	1210656-003	6010/6020	10/10/2012	3.7	mg/kg	JL
Nickel	SWMU 14-23 (12-14')	1210656-003	6010/6020	10/10/2012	7.2	mg/kg	JL
Selenium	SWMU 14-23 (12-14')	1210656-003	6010/6020	10/10/2012	<5	mg/kg	UJL
Antimony	SWMU 14-23 (14-16')	1210656-004	6010/6020	10/10/2012	<5	mg/kg	R
Cobalt	SWMU 14-23 (14-16')	1210656-004	6010/6020	10/10/2012	4	mg/kg	JL
Lead	SWMU 14-23 (14-16')	1210656-004	6010/6020	10/10/2012	3.5	mg/kg	JL
Nickel	SWMU 14-23 (14-16')	1210656-004	6010/6020	10/10/2012	6.8	mg/kg	JL
Selenium	SWMU 14-23 (14-16')	1210656-004	6010/6020	10/10/2012	<5	mg/kg	UJL
Selenium	SWMU 14-24 (0-0.5')	1210860-001	6010/6020	10/17/2012	<5	mg/kg	UJL
Selenium	SWMU 14-24 (1.5-2')	1210860-002	6010/6020	10/17/2012	<5	mg/kg	UJL

U - Consider analyte not detected.
UJ - Reporting limit itself considered an estimate.
JL - Analyte detected and identified. Associated numerical value is approximate analyte concentration. Bias in result likely to be low.
JH - Analyte detected and identified. Associated numerical value is approximate analyte concentration. Bias in result likely to be high.
UJL - Reporting limit itself considered an estimate; biased low.
UJH - Reporting limit itself considered an estimate; biased high.
E - Result above quantitation range.
R - Result rejected.

Table 3. Field Precision

JULY/OCTOBER 2012 FIELD DUPLICATE ANAYSES[1]

Analyte	Sample[2]	Duplicate[2]	Units	RPD%	Qualified
SWMU 1-24 GW					
Arsenic	0.052	0.058	mg/L	-10.9	
Barium	17	20	mg/L	-16.2	
Beryllium	0.032	0.032	mg/L	0.0	
Chromium	0.14	0.16	mg/L	-13.3	
Cobalt	0.11	0.11	mg/L	0.0	
Cyanide	0.059	0.081	mg/L	-31.4	J
Iron	160	180	mg/L	-11.8	
Lead	0.49	0.55	mg/L	-11.5	
Manganese	43	39	mg/L	9.8	
Mercury	0.00022	0.00027	mg/L	-20.4	J
Nickel	0.21	0.21	mg/L	0.0	
Selenium	0.023	0.02	mg/L	14.0	
Vanadium	0.2	0.18	mg/L	10.5	
Zinc	0.27	0.28	mg/L	-3.6	
1,2,4-Trimethylbenzene	0.015	0.014	mg/L	6.9	
Acetone	0.052	0.064	mg/L	-20.7	J
Benzene	0.02	0.019	mg/L	5.1	
Ethylbenzene	0.0089	0.0088	mg/L	1.1	
Methyl tert-butyl ether (MTBE)	0.065	0.07	mg/L	-7.4	
Naphthalene	0.022	0.021	mg/L	4.7	
Toluene	0.018	0.019	mg/L	-5.4	
Xylenes, Total	0.038	0.036	mg/L	5.4	
1-Methylnaphthalene	0.01	0.011	mg/L	-9.5	
2,4-Dimethylphenol	0.23	0.26	mg/L	-12.2	
Naphthalene	0.011	0.012	mg/L	-8.7	
Diesel Range Organics (DRO)	1.9	1.9	mg/L	0.0	
Gasoline Range Organics (GRO)	1.9	1.9	mg/L	0.0	
SWMU 1-4 (10-12')					
Barium	360	870	mg/kg	-82.9	J
Chromium	3.7	6.4	mg/kg	-53.5	J
Cobalt	2	3.1	mg/kg	-43.1	J
Iron	5300	9200	mg/kg	-53.8	J
Lead	3.1	4.4	mg/kg	-34.7	J
Manganese	550	1400	mg/kg	-87.2	J
Nickel	2.9	5	mg/kg	-53.2	J
Vanadium	12.5	19	mg/kg	-41.3	J
Acetone	0.0153	0.0116	mg/kg	27.5	J
SWMU 1-6 (2-4')					
Barium	660	930	mg/kg	-34.0	J
Chromium	6.1	7	mg/kg	-13.7	
Cobalt	3.5	3.9	mg/kg	-10.8	
Iron	9600	10000	mg/kg	-4.1	
Lead	5.4	5	mg/kg	7.7	
Manganese	1000	830	mg/kg	18.6	
Nickel	5	5.2	mg/kg	-3.9	
Vanadium	25	24	mg/kg	4.1	
Zinc	25	13	mg/kg	63.2	J
Acetone	0.477	0.46	mg/kg	3.6	
Ethylbenzene	0.00563	0.00112	mg/kg	133.6	J

Table 3. Field Precision

Analyte	Sample[2]	Duplicate[2]	Units	RPD%	Qualified
Xylenes, Total	0.0431	0.00863	mg/kg	133.3	J
SWMU 1-13 (4-6')					
Barium	120	290	mg/kg	-82.9	J
Beryllium	0.71	0.68	mg/kg	4.3	
Chromium	7.8	7.3	mg/kg	6.6	
Cobalt	4.1	4	mg/kg	2.5	
Iron	11000	11000	mg/kg	0.0	
Lead	2.5	3	mg/kg	-18.2	
Manganese	320	310	mg/kg	3.2	
Nickel	6.6	6.5	mg/kg	1.5	
Vanadium	17	16	mg/kg	6.1	
Zinc	14	14	mg/kg	0.0	
Acetone	0.0561	0.0645	mg/kg	-13.9	
Methyl tert-butyl ether (MTBE)	0.003	0.00604	mg/kg	-67.3	J
SWMU 1-14 (1.5-2')					
Barium	360	240	mg/kg	40.0	J
Beryllium	0.75	0.81	mg/kg	-7.7	
Chromium	11	11	mg/kg	0.0	
Cobalt	4.4	5	mg/kg	-12.8	
Iron	13000	15000	mg/kg	-14.3	
Lead	4.1	1	mg/kg	121.6	J
Manganese	430	350	mg/kg	20.5	J
Nickel	7.6	8.3	mg/kg	-8.8	
Vanadium	19	28	mg/kg	-38.3	J
Zinc	16	21	mg/kg	-27.0	J
Acetone	0.0202	0.0139	mg/kg	37.0	J
SWMU 1-20 (0-0.5')					
Barium	740	840	mg/kg	-12.7	
Beryllium	0.71	0.94	mg/kg	-27.9	J
Chromium	19	23	mg/kg	-19.0	
Cobalt	4	5.4	mg/kg	-29.8	J
Iron	15000	19000	mg/kg	-23.5	J
Lead	2.6	3.4	mg/kg	-26.7	J
Manganese	650	680	mg/kg	-4.5	
Mercury	0.038	0.037	mg/kg	2.7	
Nickel	6.9	8.5	mg/kg	-20.8	J
Vanadium	22	32	mg/kg	-37.0	J
Zinc	22	28	mg/kg	-24.0	J
1,2,4-Trimethylbenzene	0.0014	0.00184	mg/kg	-27.2	J
2-Butanone	0.022	0.0314	mg/kg	-35.2	J
Acetone	3.31	3.98	mg/kg	-18.4	
Benzene	0.00137	0.00188	mg/kg	-31.4	J
Ethylbenzene	0.0448	0.0622	mg/kg	-32.5	J
Isopropylbenzene	0.0021	0.00282	mg/kg	-29.3	J
Toluene	0.00197	0.00386	mg/kg	-64.8	J
Xylenes, Total	0.279	0.379	mg/kg	-30.4	J
SWMU 1-21 (0-0.5')					
Barium	440	290	mg/kg	41.1	J
Beryllium	0.77	0.89	mg/kg	-14.5	
Chromium	9.9	11	mg/kg	-10.5	
Cobalt	4.1	4.5	mg/kg	-9.3	

Table 3. Field Precision

Analyte	Sample[2]	Duplicate[2]	Units	RPD%	Qualified
Iron	14000	17000	mg/kg	-19.4	
Lead	2.6	2.3	mg/kg	12.2	
Manganese	450	470	mg/kg	-4.3	
Nickel	7.5	8.4	mg/kg	-11.3	
Vanadium	19	22	mg/kg	-14.6	
Zinc	17	18	mg/kg	-5.7	
Acetone	0.0144	0.0316	mg/kg	-74.8	J
Benzene	0.00183	0.00178	mg/kg	2.8	
Toluene	0.00147	0.00111	mg/kg	27.9	J
SWMU 1-24 (0-0.5')					
Barium	220	180	mg/kg	20.0	
Chromium	9.5	9.6	mg/kg	-1.0	
Cobalt	5.1	4.4	mg/kg	14.7	
Iron	20000	10000	mg/kg	66.7	J
Lead	9.3	7.8	mg/kg	17.5	
Manganese	520	290	mg/kg	56.8	J
Nickel	9	8.5	mg/kg	5.7	
Vanadium	24	18	mg/kg	28.6	J
Zinc	34	29	mg/kg	15.9	
1,2,4-Trimethylbenzene	0.00108	0.00156	mg/kg	-36.4	J
2-Butanone	0.00862	0.0082	mg/kg	5.0	
Acetone	0.095	0.0811	mg/kg	15.8	
Benzene	0.000878	0.00094	mg/kg	-6.8	
Ethylbenzene	0.0008	0.000989	mg/kg	-21.1	J
Toluene	0.0023	0.0029	mg/kg	-23.1	J
Trichlorofluoromethane	0.00328	0.00436	mg/kg	-28.3	J
Diesel Range Organics (DRO)	14	11	mg/kg	24.0	J
Motor Oil Range Organics (MRO)	50.5051	71	mg/kg	-33.7	J
SWMU 1-28 (1.5-2')					
Barium	570	630	mg/kg	-10.0	
Beryllium	0.41	0.75	mg/kg	-58.6	J
Chromium	5.2	6	mg/kg	-14.3	
Cobalt	2.7	4.1	mg/kg	-41.2	J
Iron	8800	10000	mg/kg	-12.8	
Lead	1.4	3.1	mg/kg	-75.6	J
Manganese	430	680	mg/kg	-45.0	J
Nickel	3.7	4.8	mg/kg	-25.9	J
Vanadium	12	22	mg/kg	-58.8	J
Zinc	8.8	12.4997	mg/kg	-34.7	J
Acetone	54.1	34.8	mg/kg	43.4	J
Benzene	2.53	2.48	mg/kg	2.0	
Toluene	3.54	2.86	mg/kg	21.3	J
Xylenes, Total	2.38	1.64	mg/kg	36.8	J
SWMU 1-32 (0-0.5')					
Barium	600	580	mg/kg	3.4	
Beryllium	0.64	0.66	mg/kg	-3.1	
Chromium	17	21	mg/kg	-21.1	J
Cobalt	4	5.1	mg/kg	-24.2	J
Iron	14000	19000	mg/kg	-30.3	J
Lead	6.3	8	mg/kg	-23.8	J
Manganese	440	540	mg/kg	-20.4	J

Table 3. Field Precision

Analyte	Sample[2]	Duplicate[2]	Units	RPD%	Qualified
Mercury	0.13	0.13	mg/kg	0.0	
Nickel	13	16	mg/kg	-20.7	J
Vanadium	22	28	mg/kg	-24.0	J
Zinc	36	43	mg/kg	-17.7	
1,2,4-Trimethylbenzene	0.00179	0.00207	mg/kg	-14.5	
1,3,5-Trimethylbenzene	0.0008	0.000842	mg/kg	-5.1	
Acetone	0.0551	0.0483	mg/kg	13.2	
Benzene	0.0014	0.00134	mg/kg	4.4	
Ethylbenzene	0.00107	0.00105	mg/kg	1.9	
Toluene	0.00442	0.00384	mg/kg	14.0	
Xylenes, Total	0.00394	0.00404	mg/kg	-2.5	
Diesel Range Organics (DRO)	19	29	mg/kg	-41.7	J
Motor Oil Range Organics (MRO)	100	200	mg/kg	-66.7	J
SWMU 14-2 (8-10')					
Antimony	0.82	0.63	mg/kg	26.2	J
Arsenic	1.6	2.1	mg/kg	-27.0	J
Barium	400	400	mg/kg	0.0	
Beryllium	0.58	0.7	mg/kg	-18.8	
Chromium	76	97	mg/kg	-24.3	J
Cobalt	3.7	4.2	mg/kg	-12.7	
Iron	14000	16000	mg/kg	-13.3	
Lead	4.6	5.7	mg/kg	-21.4	J
Manganese	400	330	mg/kg	19.2	
Mercury	0.29	1.5	mg/kg	-135.2	J
Nickel	6.6	7.5	mg/kg	-12.8	
Vanadium	20	23	mg/kg	-14.0	
Zinc	37	64	mg/kg	-53.5	J
1,2,4-Trimethylbenzene	6.2	5.4	mg/kg	13.8	
1,2-Dibromoethane (EDB)	0.29	0.26	mg/kg	10.9	
1,2-Dichloropropane	0.16	0.14	mg/kg	13.3	
1,3,5-Trimethylbenzene	0.39	0.29	mg/kg	29.4	J
1-Methylnaphthalene	16	15	mg/kg	6.5	
2-Chlorotoluene	1	0.1	mg/kg	163.6	J
2-Methylnaphthalene	17	17	mg/kg	0.0	
4-Isopropyltoluene	0.45	0.42	mg/kg	6.9	
Acetone	8.5	8.1	mg/kg	4.8	
Benzene	0.22	0.25	mg/kg	-12.8	
Ethylbenzene	1.1	1	mg/kg	9.5	
Isopropylbenzene	0.33	0.33	mg/kg	0.0	
Naphthalene	3	2.9	mg/kg	3.4	
n-Butylbenzene	0.66	0.62	mg/kg	6.3	
n-Propylbenzene	0.69	0.63	mg/kg	9.1	
sec-Butylbenzene	0.34	0.31	mg/kg	9.2	
Xylenes, Total	1	0.95	mg/kg	5.1	
1-Methylnaphthalene	16	19	mg/kg	-17.1	
2-Methylnaphthalene	16	20	mg/kg	-22.2	J
Bis(2-chloroethyl)ether	1.012	0.67	mg/kg	40.7	J
Naphthalene	2.5	3.1	mg/kg	-21.4	J
Phenanthrene	3	3.3	mg/kg	-9.5	
Diesel Range Organics (DRO)	3300	11000	mg/kg	-107.7	J
Gasoline Range Organics (GRO)	210	250	mg/kg	-17.4	

Table 3. Field Precision

Analyte	Sample[2]	Duplicate[2]	Units	RPD%	Qualified
SWMU 14-5 (0-0.5')					
Barium	490	460	mg/kg	6.3	
Beryllium	0.68	0.53	mg/kg	24.8	J
Chromium	63	29	mg/kg	73.9	J
Cobalt	5.3	3.9	mg/kg	30.4	J
Cyanide	0.6	0.5	mg/kg	18.2	
Iron	18000	12000	mg/kg	40.0	J
Lead	14	9.9	mg/kg	34.3	J
Manganese	550	870	mg/kg	-45.1	J
Mercury	0.27	0.23	mg/kg	16.0	
Nickel	9.8	7.1	mg/kg	32.0	J
Vanadium	26	19	mg/kg	31.1	J
Zinc	190	160	mg/kg	17.1	
1,1,2,2-Tetrachloroethane	0.00104	0.001	mg/kg	3.9	
Acetone	0.0181	0.0116	mg/kg	43.8	J
Benzene	0.001	0.000652	mg/kg	42.1	J
Toluene	0.000344	0.00079	mg/kg	-78.7	J
Trichlorofluoromethane	0.001	0.000315	mg/kg	104.2	J
Benzoic acid	0.44	2.509	mg/kg	-140.3	J
Diesel Range Organics (DRO)	300	280	mg/kg	6.9	
Gasoline Range Organics (GRO)	5.4	20	mg/kg	-115.0	J
Motor Oil Range Organics (MRO)	240	220	mg/kg	8.7	
SWMU 14-8 (1.5-2.0')					
Barium	690	410	mg/kg	50.9	J
Beryllium	0.88	0.93	mg/kg	-5.5	
Chromium	10	11	mg/kg	-9.5	
Cobalt	4.7	5	mg/kg	-6.2	
Iron	13000	14000	mg/kg	-7.4	
Lead	5	3.7	mg/kg	29.9	J
Manganese	190	210	mg/kg	-10.0	
Nickel	7.9	8.5	mg/kg	-7.3	
Vanadium	18	21	mg/kg	-15.4	
Zinc	15	17	mg/kg	-12.5	
1,2,4-Trimethylbenzene	6.7	8.4	mg/kg	-22.5	J
1,2-Dibromoethane (EDB)	0.31	0.43	mg/kg	-32.4	J
1,2-Dichloropropane	0.23	0.27	mg/kg	-16.0	
1,3,5-Trimethylbenzene	2.2	2.7	mg/kg	-20.4	J
1-Methylnaphthalene	2	2.1	mg/kg	-4.9	
2-Chlorotoluene	1	0.11	mg/kg	160.4	J
2-Methylnaphthalene	2.3	2.5	mg/kg	-8.3	
4-Isopropyltoluene	0.44	0.53	mg/kg	-18.6	
Acetone	7.1	6.9	mg/kg	2.9	
Benzene	0.35	0.33	mg/kg	5.9	
Ethylbenzene	3.8	4.7	mg/kg	-21.2	J
Isopropylbenzene	0.97	1.2	mg/kg	-21.2	J
Naphthalene	1.1	1.3	mg/kg	-16.7	
n-Butylbenzene	0.58	0.69	mg/kg	-17.3	
n-Propylbenzene	1.4	1.7	mg/kg	-19.4	
sec-Butylbenzene	0.47	0.62	mg/kg	-27.5	J
Toluene	1.4	1.7	mg/kg	-19.4	
Xylenes, Total	9.3	12	mg/kg	-25.4	J

Table 3. Field Precision

Analyte	Sample[2]	Duplicate[2]	Units	RPD%	Qualified
1-Methylnaphthalene	3.6	1.5	mg/kg	82.4	J
2-Methylnaphthalene	4.2	1.6	mg/kg	89.7	J
Benzoic acid	2.3	1.3	mg/kg	55.6	J
Naphthalene	1.5	0.77	mg/kg	64.3	J
Phenanthrene	1.1	0.995	mg/kg	10.0	
Pyrene	0.6	0.995	mg/kg	-49.5	J
Diesel Range Organics (DRO)	4300	3600	mg/kg	17.7	
Gasoline Range Organics (GRO)	170	240	mg/kg	-34.1	J
SWMU 14-9 (0-0.5')					
Barium	480	490	mg/kg	-2.1	
Beryllium	0.58	1	mg/kg	-53.2	J
Chromium	13	22	mg/kg	-51.4	J
Cobalt	3.8	5.9	mg/kg	-43.3	J
Cyanide	0.5	1	mg/kg	-66.7	J
Iron	14000	18000	mg/kg	-25.0	J
Lead	5.5	40	mg/kg	-151.6	J
Manganese	1800	460	mg/kg	118.6	J
Mercury	0.68	0.32	mg/kg	72.0	J
Nickel	6.3	11	mg/kg	-54.3	J
Vanadium	18	29	mg/kg	-46.8	J
Zinc	44	57	mg/kg	-25.7	J
1,1,2,2-Tetrachloroethane	0.00043	0.001	mg/kg	-79.7	J
1,2,4-Trimethylbenzene	0.002	0.00895	mg/kg	-126.9	J
1,3,5-Trimethylbenzene	0.000458	0.00292	mg/kg	-145.8	J
1-Methylnaphthalene	0.0674	0.137	mg/kg	-68.1	J
2-Methylnaphthalene	0.107	0.239	mg/kg	-76.3	J
4-Isopropyltoluene	0.001	0.000342	mg/kg	98.1	J
Acetone	0.00307	0.00472	mg/kg	-42.4	J
Benzene	0.001	0.000381	mg/kg	89.6	J
Ethylbenzene	0.000542	0.00285	mg/kg	-136.1	J
Isopropylbenzene	0.001	0.000323	mg/kg	102.3	J
Naphthalene	0.0183	0.0471	mg/kg	-88.1	J
n-Butylbenzene	0.000177	0.000938	mg/kg	-136.5	J
n-Propylbenzene	0.001	0.000675	mg/kg	38.8	J
sec-Butylbenzene	0.001	0.000284	mg/kg	111.5	J
Toluene	0.000262	0.00171	mg/kg	-146.9	J
Xylenes, Total	0.00282	0.0168	mg/kg	-142.5	J
1-Methylnaphthalene	1.5	1.5	mg/kg	0.0	
2-Methylnaphthalene	1.9	1.7	mg/kg	11.1	
3+4-Methylphenol	0.4	1	mg/kg	-85.7	J
Benzoic acid	0.59	0.79	mg/kg	-29.0	J
Bis(2-ethylhexyl)phthalate	2.6	1	mg/kg	88.9	J
Phenanthrene	1.7	1.9	mg/kg	-11.1	
Diesel Range Organics (DRO)	1000	1000	mg/kg	0.0	
Gasoline Range Organics (GRO)	20	27	mg/kg	-29.8	J
SWMU 14-20 (0-0.5')					
Barium	940	890	mg/kg	5.5	
Beryllium	0.69	0.76	mg/kg	-9.7	
Chromium	9.4	8.7	mg/kg	7.7	
Cobalt	5.2	7	mg/kg	-29.5	J
Iron	13000	14000	mg/kg	-7.4	

Table 3. Field Precision

Analyte	Sample[2]	Duplicate[2]	Units	RPD%	Qualified
Lead	2.7	3	mg/kg	-10.5	
Manganese	650	910	mg/kg	-33.3	J
Mercury	0.0064	0.007	mg/kg	-9.0	
Nickel	6.9	8	mg/kg	-14.8	
Vanadium	21	24	mg/kg	-13.3	
Zinc	17	22	mg/kg	-25.6	J
Trichlorofluoromethane	0.000525	0.001	mg/kg	-62.3	J
Gasoline Range Organics (GRO)	1.7	5	mg/kg	-98.5	J
SWMU 14-22 (4-6')					
Barium	170	170	mg/kg	0.0	
Beryllium	0.89	0.84	mg/kg	5.8	
Chromium	7.6	6.8	mg/kg	11.1	
Cobalt	4.3	3.9	mg/kg	9.8	
Iron	13000	12000	mg/kg	8.0	
Lead	4	4.2	mg/kg	-4.9	
Manganese	370	230	mg/kg	46.7	J
Nickel	7.2	6.5	mg/kg	10.2	
Vanadium	13	12	mg/kg	8.0	
Zinc	13	12	mg/kg	8.0	
Acetone	0.0151	0.0149	mg/kg	1.3	
Benzene	0.0019	0.00171	mg/kg	10.5	
Toluene	0.00162	0.0012	mg/kg	29.8	J

[1]RPD not calculated if analyte not detected in sample and duplicate.

[2]RDL used for ND if analyte not detected in either sample or duplicate.

RPD% = ((SR-DR)*200)/(SR+DR)

INVESTIGATION REPORT

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Gallup Refinery
Western Refining Southwest, Inc.
Gallup, New Mexico

EPA ID# NMD000333211

Volume 1 of 2
(Report, Tables and Figures)

February 2013
(Revised June 2014 and August 2015)

Billy McClain
Refinery Manager
Western Refining Southwest, Inc.
Gallup Refinery

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Volume 2 of 2
(Appendices A - F)

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Table of Contents

List of Sections

List of Acronyms A-1

Executive Summary E-1

Section 1 Introduction 1

Section 2 Background 3
2.1 SWMU No. 1 Aeration Basin 3
2.2 SWMU No. 14 Old API Separator 8

Section 3 Scope of Activities 12
3.1 Soil Boring, Monitoring Well Installation and Sample Collection 12
3.2 Background Information Research 14
3.3 Collection and Management of Investigation Derived Waste 14
3.4 Surveys 14

Section 4 Field Investigation Results 16
4.1 Surface Conditions 16
4.2 Subsurface Conditions 17
4.3 Exploratory Drilling Investigations, Soil Sampling and Boring Abandonment 21
4.4 Monitoring Well Construction and Groundwater Sampling 44

Section 5 Regulatory Criteria 48

Section 6 Site Impacts 51
6.1 Soil Analytical Results 51
6.2 Groundwater Analytical Results 55
6.3 General Groundwater Chemistry 60

Section 7 Conclusions and Recommendations 62
7.1 Conclusions 62
7.2 Recommendations 68

Section 8 References 69

List of Tables

Table 1 Historical Groundwater Analyses
Table 2 Groundwater Level Measurements
Table 3 Soil Boring – Vapor Screening Results
Table 4 Residential Soil Screening Levels
Table 5 Non-Residential Soil Screening Levels
Table 6 Groundwater Screening Levels
Table 7 Aeration Basin Soil Analytical Results Summary
Table 8 Old API Separator Soil Analytical Results Summary
Table 9 Aeration Basin Groundwater Analytical Results Summary
Table 10 Old API Separator Groundwater Analytical Results Summary
Table 11 Groundwater Field Measurements
Table 12 SWMU No. 1 Soil Cumulative Risk and Hazard Index Evaluation
Table 13 SWMU No. 14 Soil Cumulative Risk and Hazard Index Evaluation
Table 14 SWMU No. 1 Groundwater Cumulative Risk Evaluation
Table 15 SWMU No. 14 Groundwater Cumulative Risk Evaluation

Table of Contents (Continued)

List of Figures

Figure 1 Site Location Map
Figure 2 SWMU No. 1 Sample Locations
Figure 3 SWMU No. 14 Sample Locations
Figure 4 Topographic Map
Figure 5 Geologic Map of New Mexico
Figure 6 Cross Section A-A' West to East
Figure 6A Cross Section Location Map
Figure 7 Cross Section B-B' North to South
Figure 7A Cross Section Location Map
Figure 8 Cross Section C-C' North to South
Figure 9 Sand Isopach Map
Figure 10 Paleotopographic Map
Figure 11 Potentiometric Surface Map August 2009
Figure 12 1,2,4-Trimethylbenzene Soils Concentration Map – SWMU No. 1
Figure 13 1-Methylnaphthalene Soils Concentration Map – SWMU No. 1
Figure 14 Benzene Soils Concentration Map – SWMU No. 1
Figure 15 Naphthalene Soils Concentration Map – SWMU No. 1
Figure 16 Diesel Range Organics Soils Concentration Map – SWMU No. 1
Figure 17 1,1,2-Trichloroethane Soils Concentration Map – SWMU No. 14
Figure 18 1,2,4-Trimethylbenzene Soils Concentration Map – SWMU No. 14
Figure 19 1,2-Dibromo-3-chloropropane Soils Concentration Map – SWMU No. 14
Figure 20 1,2-Dibromomethane Soils Concentration Map – SWMU No. 14
Figure 21 1,2-Dichloropropane Soil Concentration Map – SWMU No. 14
Figure 22 1-Methylnaphthalene Soils Concentration Map – SWMU No. 14
Figure 23 2-Methylnaphthalene Soils Concentration Map – SWMU No. 14
Figure 24 Benzene Soils Concentration Map – SWMU No. 14
Figure 25 Ethylbenzene Soils Concentration Map – SWMU No. 14
Figure 26 Naphthalene Soils Concentration Map – SWMU No. 14
Figure 27 Xylenes Soils Concentration Map – SWMU No. 14
Figure 28 Bis (2-chloroethyl) ether Soil Concentration Map – SWMU No. 14
Figure 29 Diesel Range Organics Soils Concentration Map – SWMU No. 14
Figure 30 SWMU No. 1 and No. 14 Metals Groundwater Concentration Map
Figure 31 SWMU No. 1 and No. 14 Organics Groundwater Concentration Map

List of Appendices

Appendix A Trihydro Report, June 2008
Appendix B Field Methods
Appendix C Site-Specific Dilution/Attenuation Factor Calculations
Appendix D Boring Logs
Appendix E Analytical Data Reports
Appendix F Quality Assurance/Quality Control Review

List of Acronyms

API	American Petroleum Institute
AOCs	areas of concern
BTEX	benzene, toluene, ethylbenzene, and xylene
bgl	below ground level (bgl)
CFR	Code of Federal Regulations
DRO	diesel range organics
DAF	dilution/attenuation factor
EPA	Environmental Protection Agency
gpm	gallons per minute
HI	hazard index
HSA	hollow-stem auger
IDW	investigation derived waste
LPG	liquefied petroleum gas
LTU	Land Treatment Unit
MADEP	Massachusetts Department of Environmental Protection
MCL	maximum contaminant level
msl	mean sea level
MW	monitoring well
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
RCRA	Resource Conservation and Recovery Act
PID	photoionization detector
PVC	polyvinyl chloride
SPH	separate phase hydrocarbon
SWMUs	Solid Waste Management Units
TPH	total petroleum hydrocarbon
TVOC	total volatile organic content
TCLP	toxicity characteristic leaching procedure
USCS	unified soil classification system
VOC	volatile organic constituent
WQCC	Water Quality Control Commission

Executive Summary

The Gallup Refinery, which is located 17 miles east of Gallup, New Mexico, has been in operation since the 1950s. Past inspections by State and federal environmental inspectors have identified locations where releases to the environment may have occurred. These locations are generally referred to as Solid Waste Management Units (SWMUs) or Areas of Concern (AOCs). Pursuant to the terms and conditions of the refinery's Resource Conservation and Recovery Act (RCRA) Post-Closure Care Permit and 20.4.1.500 New Mexico Administrative Code, this environmental site investigation was completed for SWMU No. 1 (Aeration Basin) and SWMU No. 14 (Old API Separator).

The activities completed include sampling and analysis of soils and groundwater surrounding the Aeration Basin and Old API Separator to determine if there has been a release to the environment and to delineate any such release. In addition, information was collected to help determine the source of groundwater that has been observed in monitoring wells GWM-2 and GWM-3. The investigation began on July 16, 2012 and continued through October 16, 2012. This included the completion of 63 soil borings with 171 soil samples (excluding additional quality assurance samples) collected for analysis of potential site-related constituents (e.g., volatile and semi-volatile organics, total petroleum hydrocarbons, and metals). One of the soil borings (SWMU 14-2) near the Old API Separator was completed as a permanent monitoring well (OAPIS-1) and temporary well completions were installed in 10 additional borings to allow collection of groundwater samples. Twelve groundwater samples (excluding additional quality assurance samples) were collected for analysis of potential site-related constituents (e.g., volatile and semi-volatile organics, total petroleum hydrocarbons, metals, and inorganic/general water quality parameters).

At the Aeration Basin, four organic constituents (1,2,4-trimethylbenzene, 1-methylnaphthalene, benzene, and naphthalene) and diesel range organics (DRO) were detected in three soil samples at concentrations exceeding their respective screening levels developed to ensure protection of potable groundwater. The three impacted soil samples were located at the north and south ends of the Aeration Basin.

There were numerous metals detected at concentrations above residential / tap water screening levels in groundwater samples collected from the soil borings that surround the Aeration Basin. The metal residential / tap water screening levels were exceeded in every soil boring from which

a groundwater sample was collected. It is possible that these results are affected by high turbidity levels in the water samples collected from the temporary well completions installed in the soil borings. Seven organic constituents (1-methylnaphthalene, 2-methylnaphthalene, 1,2,4-trimethlybenzene, benzene, methyl tert-butyl ether (MTBE), naphthalene, and 2,4-dimethylphenol), and DRO were detected in groundwater samples collected from soil borings at concentrations above residential / tap water screening levels. At least one organic constituent was found at concentrations above the residential / tap water screening levels in groundwater at five borings immediately surrounding the Aeration Basin and one boring a short distance to the southwest. Some of the deep soil borings completed near the Aeration Basin were either dry or would not produce enough water to allow completion of all scheduled analyses.

At the Old API Separator (OAPIS), twelve organic constituents [1,1,2-Trichloroethane, 1,2,4-trimethylbenzene, 1,2-dibromo-3-chloropropane, 1,2-dibromoethane (EDB), 1,2-dichloropropane, 1-methylnaphthalene, 2-methylnaphthalene, benzene, ethylbenzene, naphthalene, xylenes, and bis(2-chloroethyl)ether] and DRO were detected in soils at concentrations above their screening levels developed to ensure protection of potable groundwater. 1,2-Dibromo-3-chloropropane was detected in one soil sample and 1,2-dibromoethane (EDB) was detected in four soil samples at concentrations above their residential direct contact soil screening levels. The highest concentrations were found in soil samples collected directly beneath the former location of the OAPIS and at borings immediately adjacent to the OAPIS. In addition, there is an area of elevated concentrations at depths of 8 to 12 feet below ground level (bgl) located near the west end of the former OAPIS extending north towards the location of the former benzene strippers.

Groundwater samples were collected from two soil borings near the OAPIS, one of which was completed as a permanent monitoring well. Similarly as observed above for the temporary well completions around the Aeration Basin, many metals were detected above residential / tap water screening levels in the groundwater samples collected at these locations. The number of metals detected at concentrations above their residential / tap water screening levels in the groundwater sample collected from the permanent well completion (OAPIS-1) was significantly less than the number detected in the groundwater sample collected from the initial temporary well completion in this same soil boring. It is possible that these results are affected by high turbidity levels in the water samples collected from the temporary well completions. Seven organic constituents (benzene, 1-methlynaphthalene, 2-methylnaphthalene, 1,2,4-

trimethlybenzene, methylene chloride, MTBE, and naphthalene) and DRO were detected at concentrations above their residential / tap water screening levels in groundwater samples.

Potential future actions include an additional soil boring to the north of the Aeration Basin to provide full delineation of both soil and groundwater impacts to the north of the Aeration Basin. Also an additional boring to the southwest of the Aeration Basin could provide additional control in this area for potential groundwater impacts. The area between the OAPIS and the Aeration Basin is relatively small and does not warrant additional investigation to determine if there is possible separation of impacts sourced from the two different SWMUs. An additional soil boring could be installed east of the OAPIS to provide full delineation of soil impacts observed in this area. Additional soil data to the southwest of the OAPIS could be used to better define soil impacts observed in this area of the site.

Section 1
Introduction

The Gallup Refinery is located approximately 17 miles east of Gallup, New Mexico along the north side of Interstate Highway I-40 in McKinley County. The physical address is I-40, Exit #39 Jamestown, New Mexico 87347. The Gallup Refinery is located on 810 acres. Figure 1 presents the refinery location.

The Gallup Refinery is a crude oil refinery currently owned and operated by Western Refining Southwest, Inc., formerly known as Giant Industries Arizona, Inc. and formerly doing business as Giant Refining Company Ciniza Refinery, an Arizona corporation. The Gallup Refinery generally processes crude oil from the Four Corners area transported to the facility by pipeline or tanker truck.

Various process units are operated at the facility, including crude distillation, reforming, fluidized catalytic cracking, alkylation, isomerization, sulfur recovery, merox treater, and hydrotreating. Current and past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

The area of investigation that is the subject of this report is shown on Figure 2 for the Aeration Basin (SWMU No. 1) and Figure 3 for the Old API Separator (SWMU No. 14). The purpose of the site investigation is to determine and evaluate the presence, nature, and extent of releases of contaminants in accordance with 20.4.1.500 New Mexico Administrative Code (NMAC) incorporating 40 Code of Federal Regulations (CFR) Section 264.101. The investigation was completed pursuant to the SWMU No. 1 Investigation Work Plan dated February 2012 (revised June 2012) and the SWMU No. 14 Investigation Work Plan dated January 2010 (revised October 2010), with a few deviations (e.g., installation of additional soil borings), which are discussed in Section 3.1.

Section 2 presents background information for SWMU No. 1 and No. 14, including a review of historical waste management activities to help identitfy the types of waste handled, sources of releases, and previously known impacts to the environment. Section 3 describes the scope of work completed during the site investigation, including completion of soil borings, installation of a monitoring well, and sample collection. The fourth section of the report explains the results of the field investigation, including the general surface and subsurface conditions and detailed site-

specific information acquired during subsurface investigations. Section 5 explains the regulatory standards that are used for comparison to the analytical results and Section 6 presents the analytical results of soil and groundwater samples analyzed for volatile and semi-volatile organic constituents, total petroleum hydrocarbons (TPH), metals, and inorganic general chemistry constituents. The results of these analyses are compared to applicable State or federal cleanup and screening levels. Section 7 summarizes and provides an evaluation of the potential impacts and provides recommendations for any future actions.

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Section 2
Background

This section presents background information for SWMU No. 1 and No. 14, including a review of historical waste management activities for each SWMU to identity the following:

- Type and characteristics of waste and contaminants handled;
- Known and possible sources of impacts;
- History of releases; and
- Known extent of impacts prior to the current investigation.

2.1 SWMU No. 1 Aeration Basin

The Aeration Basin, which is designated as SWMU No. 1 in the facility's RCRA Post-Closure Care Permit, was constructed within original Pond No. 1 in 1987. The location and extent of the Aeration Basin is documented in the Post-Closure Care Permit, Attachments – Post-Closure Permit Application Volume III. The Aeration Basin includes three cells, which were created within original Pond No.1 to facilitate the addition of aeration units to the facility's wastewater treatment. These three cells are identified in the RCRA Permit as Inlet Aeration Basin, Second Aeration Basin and Holding Pond. Subsequently, the first two cells (Inlet Aeration Basin and Second Aeration Basin) have become known as the aeration lagoons or more specifically, AL-1 and AL-2. The third cell (Holding Pond) is now commonly referred to as EP-1, although it is not an evaporation pond and is not part of the area covered by SWMU No. 2 - Evaporation Ponds. Hereafter, the currently used designations of AL-1, AL-2 and EP-1 are used to refer to the three cells of SWMU No. 1 – Aeration Basin (Figure 2).

The aeration lagoons (AL-1 and AL-2) cover an area approximately 275 feet by 150 feet and have an estimated holding capacity of 1 million gallons. EP-1 is approximately 225 feet by 250 feet and has an estimated holding capacity of 3 million gallons. Three benzene air strippers were located between the refinery's API separator and the aeration lagoons to prevent characteristically hazardous waste from being discharged to the aeration lagoons. Monitoring data of the effluent from the two original benzene air strippers, which discharges into the inlet aeration lagoon, and flows into AL-2 has indicated that concentrations of benzene above the toxicity characteristic (TC) regulatory threshold of 0.5 milligrams per liter (mg/l) have entered these impoundments.

2.1.1 Operational History

Prior to construction of the new wastewater treatment plant, the refinery process wastewater generated (approximately 178 gallons per minute (gpm) average flows for calendar year 2011) at the Gallup Refinery was managed first by physical treatment in an API separator, and then the volatile components were removed via benzene air strippers. The final treatment (biological) occurred in two aeration lagoons operated in series (AL-1 and AL-2). Water then flowed to EP-1, before being discharged to the evaporation ponds. The lagoons and EP-1 are earthen surface impoundments with natural clay functioning as a bottom liner. AL-1 and AL-2 are equipped with surface aerators to oxygenate the water and stimulate biological activity.

Wastewater from AL-1, subject to aggressive biological treatment, is routed to AL-2 through an overflow pipe. Flows to the aeration lagoons measured as totalized flow from the API Separator averaged 178 gallons per minute (gpm) for calendar year 2011. Totalizer readings were recorded weekly. Daily average flows were calculated based on elapsed time between readings. Western has installed a real time electronic data system that captures minute by minute flow data.

Western recently completed the construction of a new wastewater treatment plant that replaces the Aeration Basin. In April 2012, wastewater flows from the refinery were redirected to the new wastewater treatment plant. The Aeration Basin continued to receive wastewater from the nearby Pilot Travel Center until June 2013, when all wastewater flows were directed to the new wastewater treatment plant.

2.1.2 Prior Maintenance Activities

Western has experienced intermittent discharges of oil and oily water into the lagoons as documented in previous correspondence to NMED. Most of these occurrences were the result of unit upset/large storm events affecting the old API Separator. Some recent examples are described below:

- A release of oily water from the old API separator and its inlet box occurred on August 3, 2005 with approximately 17 cubic yards of impacted soils excavated from AL-1 and AL-2;
- Approximately 13 cubic yards of impacted soils were excavated from AL-1 and AL-2 after a release of oily water from the old API separator occurred on August 15, 2005;

- On June 15, 2006, Western submitted a letter to NMED requesting a “contained-in” determination regarding soil excavated from AL-1, AL-2 and EP-1 to remediate releases of oily water containing F037/F038, which occurred in the fall of 2005;

- A release of approximately 700-800 gallons of oil from the new API separator (NAPIS) occurred on March 3, 2007 to AL-1, AL-2, and EP-1, which resulted in the collection additional effluent samples at AL-1, AL-2 and EP-1. In July 2007, the impacted bank soils were removed from the aeration lagoons (AL-1 and AL-2), EP-1 and evaporation pond EP-2. NMED stated in their letter of August 15, 2007, that the oily wastewater contained benzene (D018) and F037/F038-listed waste; however, the excavated soils were determined to meet the contained-in criteria and the excavated materials were appropriately disposed off-site pursuant to NMED’s direction;

- On June 23, 2007 and July 19, 2007, oily wastewater reported to contain benzene (D018) and F037/F038-listed waste was released from the weir box at the NAPIS. The impacted soils were removed and subsequent analyses demonstrated the soils met the contained-in criteria for management as non-hazardous waste; and

- On August 3, 2008, 756 gallons of oily wastewater was discharged from the NAPIS to the Aeration Basin. The impacted soils were removed and disposed off-site pursuant to NMED’s approval.

2.1.3 Historical Site Investigations

Soil sampling was conducted near the aeration lagoons and EP-1 during the RFI in the early 1990s (Giant Refining Company, 1991). Based on the analytical results from the samples, the EPA concurred on January 7, 1994 with Giant’s determination that no significant impact had occurred and thus no further action was required for SWMU #1. EPA requested that on-going soil sampling be conducted at the lagoons every two years, which was later reduced to a frequency of five years. The first “monitoring” event was completed in October, 1996 (Giant Refining Company, 1996). Soil samples were collected from depths of four feet to 20 feet below ground surface with some borings angled to allow collection of samples beneath the lagoons. Neither volatile nor semi-volatile organics were detected in 25 of the samples. Two samples collected near the side wall of the inlet aeration lagoon at a depth of four feet had very low concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX). The highest concentration was 2.2 mg/kg of xylenes.

A visual assessment of the lagoons was conducted in 1998, which concluded that the lagoons were in active service, functioning normally, oxygenating wastewater, and stimulating biological activity (Practical Environmental Services, Inc., 1998). The lagoons were found to have been placed in an appropriate geologic setting in which the underlying bentonitic soils exhibited a very

low hydraulic conductivity of 10^{-7} cm/sec, effectively serving as an aquitard. The noted concentrations of BTEX near the inlet were considered common and predictable for the service.

Two groundwater monitoring wells (GWM-1 and GWM-2) were installed immediately down-gradient of the aeration lagoons in 2004 and 2005, respectively. Analyses of groundwater samples collected at GWM-1 and GWM-2 have indicated only very low concentrations of constituents such as BTEX and MTBE that would indicate a potential for historical releases from the lagoons. GWM-3 is also located nearby, adjacent to EP-1. Both GWM-2 and GWM-3, which were intentionally installed in the vadose zone as dry wells to detect potential leakage from SWMU No. 1, were dry during the 2007 annual sampling event.

In 2008 GWM-1 was sampled on July 10 and results are submitted to NMED annually (Western Refining Annual Ground Water Monitoring Reports). Detections at concentrations greater than established comparison criteria included benzene (0.011 mg/L), MTBE (0.12 mg/L), arsenic (0.070 mg/L), manganese (3.6 mg/L) and iron (14 mg/L). Iron and manganese detections may be indicative of reducing groundwater conditions that could alter inorganic valence states leading to elevated concentrations of iron and manganese in groundwater.

GWM-2 and GWM-3 were checked quarterly in 2008 to determine if any water was present in the wells. Water was first encountered in GWM-2 on February 18, 2008 and a sample was subsequently collected on February 28, 2008 and analyzed for petroleum hydrocarbons and volatile organic compounds (VOCs). The only constituent detected was MTBE at a concentration of 0.028 milligrams per liter. GWM-2 was checked again on March 17, 2008, May 21, 2008, September 10, 2008, and November 3, 2008, but it was found to be dry each time. GWM-3 was also checked on these same dates and found to be dry. Both wells were checked quarterly during 2009 and found to be dry on each occasion.

Water levels continue to be checked quarterly in GWM-2 and GWM-3 and during the second quarterly inspection in 2010 both wells indicated the presence of water. An estimated water column thickness of 1.5 feet and 0.88 feet was measured at GWM-2 and GWM-3, respectively. Water was present in both wells and samples were collected for analysis on a quarterly basis through November 2012. During the first quarterly sampling event in 2013 (March 18, 2013), GWM-3 was found to be dry and water has not been present in the well during subsequent quarterly monitoring events through March 11, 2014. Water was found in GWM-2 until the first quarterly sampling event in 2014. The results of the historical chemical analyses are

summarized in the Table 1 through March 2012. As indicated in the tables, there have been a number of constituents detected in water samples collected from GWM-1, GWM-2, and GWM-3 that are at concentrations above potentially applicable action levels. Water level measurements are also included in Table 2.

An investigation of the aeration lagoons and EP-1 was conducted in April 2008 to characterize the volume and nature of sediments in each lagoon. A copy of the report of the investigation prepared by Trihydro Corporation is included as Appendix A. Based on this investigation, there appears to be two layers of sludge/sediment in the aeration lagoons. The upper layer ("soft sediment") is described as a soft, loose, and unconsolidated, as opposed to the lower layer ("hard pack sediment") that is more compact and dense. In some areas, the distinction between the two layers is indiscernible.

The investigation of EP-1 did not yield a similar distinction of sediment layers. The sediment in EP-1 exhibits similar physical characteristics to the soft sediment found in AL-1 and AL-2. Sixteen sediment depth measurements were made in EP-1, however only 5 measurements resulted in sediment depths greater than 2 feet. The sediment appearance was described as a black sludge with fluid in the upper portion and an increasing silt content moving deeper through the sample

Trihydro used the software program SurvCAD to produce calculations estimating the volumes of sediment in each lagoon and EP-1. Appendix E of the Trihydro Report provides the input parameters used in the program. The SurvCAD program produced the following estimates for sediment in the two lagoons and EP-1.

Estimated Volumes of Sludge in AL-1 and AL-2

Unit	Soft Sediment Thickness Min/Max (ft)	Soft Sediment Avg Thickness (ft)	Estimated Soft Sediment Volume (cy)	Hardpack Sediment Thickness Min/Max (ft)	Hardpack Sediment Avg Thickness (ft)	Estimated Hardpack Sediment Volume (cy)	Total Estimated Sediment Volume (cy)
AL-1	3.2-5.9	4.4	1,464	0-2.5	0.52	229	1,693
AL-2	5.8-8.5	7.47	3,404	0-2.2	0.96	430	3,834

Estimated Volumes of Sludge in EP-1

Unit	Average Sediment Depth (ft)	Maximum Sediment Depth (ft)	Estimated Sediment Volume (cy)
EP-1	1.59	5.04	3,178

Trihydro notes that the observed distinction between the two types of sediment in the aeration lagoons was not as evident as expected and therefore, it is suggested that sediment in the lagoons be considered and treated as a single sediment layer. Additionally, since the measurements and calculations are in-situ calculations, the SurvCAD program applied no allowances for expansion or compaction to the calculated estimates. Removal of the material from the lagoons or exposure to ambient air reducing the percent moisture of the sediment may impact the volume of material. Sample log sheets for each location can be found in the Trihydro Report (Trihydro Corporation, 2008).

2.2 SWMU No. 14 Old API Separator

The Old API Separator was not originally included as a SWMU in the 1988 Hazardous and Solid Waste Act (HSWA) permit or the subsequent 1990 RFI Work Plan. The “API Separator” was first added as a SWMU in the August 2000 Post-Closure Care Permit. There were two API Separators at the refinery as shown in Figure 2.

2.2.1 Operational History

The original separator, now referred to as the Old API Separator (OAPIS) was put into service in 1957. The OAPIS initially only received process wastewater and in 1996 a stormwater sewer system was installed that also flowed to the OAPIS. A new API Separator was put into service in October 2004 and the process wastewater was redirected to the New API Separator. The intention was that only the stormwater sewer system would continue to be directed to the OAPIS.

The API Separator is the first step in the treatment process of the refinery’s wastewater. Its purpose is to remove free oil and suspended solids from the wastewater prior to subsequent downstream treatment. An API Separator functions as a gravitational separation unit and is designed based on the difference in specific gravity of the oil to be separated and the wastewater. Three phases result in the separator, with oil at the top, wastewater in the middle and accumulated sediment in the bottom. The oil is constantly removed from the upper layer, wastewater flows through continuously, and the bottom sediment layer is periodically removed to

ensure proper function of the separator. The material accumulating in the bottom of the OAPIS has been routinely removed once a year or more frequently, as necessary.

The OAPIS was approximately 135 feet long, 22 feet wide and six feet high. The unit was mostly below ground level with the southern side being mostly at grade. The land surface slopes away to the north and up to approximately two feet of the separator was above grade in some locations. The unit was constructed on compact clay soils.

2.2.2 Prior Maintenance Activities

After the wastewater flows were diverted to the New API Separator, all residual materials were removed from the OAPIS in October 2004. The material was removed using vacuum trucks and sent off-site for recycling at the NORCO refinery. The OAPIS was steam cleaned and sand blasted in preparation for inspection and repairs. The concrete was patched in numerous locations in both bays and the weir wall down-stream of the pipe skimmer was rebuilt on both bays. Stained soil (approx. 4,500 lbs) identified around the perimeter of the separator was removed and sent off-site for disposal as hazardous waste (K051).

In 2006, Western identified potential “dry weather” flows into the OAPIS and undertook an investigation of the sewer systems to determine if process wastewater was continuing to flow to the OAPIS. Flows from the OAPIS were directed to the New API Separator to ensure any potential process wastewaters entering the OAPIS were appropriately managed. A dye tracer study did not identify any cross-connections between the process wastewater and stormwater sewers. To help reduce the potential for process wastewater to flow to the OAPIS, numerous changes were made to both the stormwater drains and the process sewer drains in the summer of 2006.

The OAPIS was in service until recently to handle stormwater flows but in spite of extensive efforts to eliminate dry weather flows, it appears that some dry weather flow continued to enter the unit until it was taken out of service in February 2011. The discharge from the OAPIS was directed to the New API Separator to ensure appropriate treatment of any dry weather flow that may have entered the OAPIS. A new wastewater treatment plant was recently constructed at the Gallup Refinery and the OAPIS is no longer required, thus its removal from service.

The OAPIS was cleaned out in December 2011 to remove any potentially listed hazardous waste and all non-hazardous waste materials. Demolition of the OAPIS, which was conducted from

June 11, 2012 through June 20, 2012, included removal of the metal components and the concrete containment with the exception of a portion of the southern wall, which was required to remain in-place to maintain the physical integrity of the structures (e.g., the flare knockout tank) located immediately south of the OAPIS.

The nearby benzene strippers were removed from service on November 9, 2012. After they were disconnected from the wastewater treatment plant piping, Strippers #1, #2, and #3 were decontaminated by first removing the packing and then rinsing with water in-place. After decontamination was completed, the strippers were taken to the Bone Yard where they were cut up for disposal. The packing material was placed into supersacks and taken to the 90-day storage area for off-site disposal as a hazardous waste.

2.2.3 Historical Site Investigations

The material handled in the OAPIS has primarily been petroleum hydrocarbons, with a lesser potential for refinery catalyst and gasoline additives to enter the sewer systems. As the solids that accumulate in the bottom of the separator are routinely removed, the greatest potential for a release from the unit would be the liquid phase containing dissolved petroleum hydrocarbons. Liquids could leak from the unit along cracks in the below ground concrete structure or from piping that transfers liquids into and from the unit.

There have not been any documented historical releases from the OAPIS with the aforementioned noted exception of the identification of some surface soils with hydrocarbon stains around the sides of the unit. These stained soils were removed and this limited volume of material did not indicate an obvious significant release.

There had not been an investigation of soils or groundwater in the immediate vicinity of the OAPIS prior to this investigation. There are existing monitoring wells in the general area, with two wells (GMW-1 and GWM-2) located along the down-gradient side of the Aeration Basin and also possibly down-gradient of the OAPIS and four monitoring wells near the New API Separator (NAPIS 1, NAPIS 2, NAPIS 3, and KA-3), which are cross-gradient to the OAPIS (Figure 2). Analyses of groundwater samples collected from these wells are discussed above in Section 2.1.3.

The soil and groundwater samples obtained for this investigation were collected from July 16, 2012 through October 17, 2012. On January 15, 2013, a spill of 70 barrels oily wastewater

occurred onto the ground in the area where OAPIS was located. Western began immediate spill response actions and recovered 69.5 barrels of the spilled wastewater. The spill was limited to a small area within the original footprint of the OAPIS. The soil samples, which had previously been collected from this area, documented significant hydrocarbon impacts in this same area and the relatively dilute wastewater should not have resulted in an increase in concentrations such that the previously collected information would not be a valid representation of current conditions.

Section 3
Scope of Activities

3.1 Soil Boring, Monitoring Well Installation and Sample Collection

Pursuant to the approved Investigation Work Plans, an investigation of soils and groundwater was conducted to determine and evaluate the presence, nature, extent, fate, and transport of contaminants. To accomplish this objective, soil borings and monitoring wells were installed at the Aeration Basin (Figure 2) and the OAPIS (Figure 3).

As outlined in the Investigation Work Plans, there is the potential for constituents to have been released to soils at known locations and therefore a judgmental sampling design was implemented. Examples of these areas include documented spills that affected soils immediately adjacent to the OAPIS.

3.1.1 SWMU No. 1 Aeration Basin

The scope of work for the investigation at the Aeration Basin included approximately 28 shallow (i.e., 2-foot) soil borings spaced 50 feet apart around the perimeter of the Aeration Basin, with each fifth boring extended at least 6 inches below the bottom of the berm material if the berm material is deeper than 24 inches. In addition, eight deep soil borings were to be installed with groundwater samples collected, as possible, from temporary well completions in each deep boring.

Twenty eight shallow soil borings (SWMU 1-9 through SWMU 1- 23, SWMU 1-25 through SWMU 1-36, and SWMU 1-39) were completed and each fifth boring was extended at least 6 inches below the bottom of the berm material where the berm material was deeper than 24 inches (Figure 2). Eight deep soil borings (SWMU 1-1 through SWMU 1-8) were installed around the perimeter as required in the Investigation Work Plan and three additional deep soil borings (SWMU 1-24, SWMU 1-37, and SWMU 1-38) were completed to the southwest and west to facilitate lateral delineation. Based on observations of probable impacts at boring SWMU 1-4, shallow borings SWMU 1-19, SWMU 1-20 (extended deeper), SWMU 1-21, SWMU 1-22, SWMU 1-23, and SWMU 1-39) were shifted to the west to better facilitate lateral delineation on the west side of the Aeration Basin (Figure2). The installation of each boring is discussed in more detail in Section 4.3.

In addition to moving the specific borings discussed above, other deviations from the Investigation Work Plan include the inability to extend some of the shallow borings with a hand auger to the scheduled depth of two feet. The borings are discussed in detail in Section 4.3. Stiff clay with gravel was encountered in these borings, which prevented advancement with a hand auger. An attempt was made to loosen the compacted clay/gravel in advance of the hand auger using a hammer and decontaminated screwdriver, but it was still not possible to reach the target depth of two feet in all hand auger locations.

All eight of the scheduled deep soil borings (SWMU 1-1 through SWMU 1-8) were drilled to the top of bedrock (i.e., the Petrified Forest Formation) and groundwater samples were collected from temporary well completions in all but one of the borings. Soil boring SWMU 1-1 did not yield water and boring SWMU 1-5 yielded only a small quantity of water, which limited the analyses that could be performed (i.e., metals analyses were not conducted at SWMU 1-5). Low water yields affected other temporary wells also, but metals and all other analyses were completed with the exception that only total analyses were completed for the metals. Groundwater samples were also collected from temporary well completions in two of the additional soil borings (SWMU 1-24 and SWMU 1-37).

3.1.2 SWMU No. 14 Old API Separator

The scope of work for the OAPIS included nine soil borings installed to a minimum depth of ten feet and if groundwater was encountered, then a groundwater sample was to be collected from a temporary well completion. One of the soil borings on the north side of the benzene strippers was to be completed as a permanent monitoring well. In addition, soil samples from depths of 0-0.5’ and 1.5-2.0’ were to be collected from 11 additional locations using a hand auger.

Three of the deep soil borings were not completed as scheduled. One boring that was to be drilled beneath the center of the location of the benzene strippers could not be completed because the benzene strippers were still in operation during the investigation; the strippers have since been removed. Two of the planned deep borings (SWMU 14-5 and SWMU 14-8 located on the north side and northwest corner of the OAPIS) had to be installed with a hand auger instead of the hollow-stem auger (HSA) method due to access limitations with the drilling rig (Figure 3). The location for the permanent well (OAPIS-1) was moved slightly to the south, to a location just off the northwest corner of the benzene strippers. Four additional deep borings (SWMU 14-6, SWMU 14-21, SWMU 14-22, and SWMU 14-23) and one hand auger location

(SWMU14-24) were completed to help delineate the lateral extent to the east, south, and west of the OAPIS.

3.2 Background Information Research

Documents containing the results of previous investigations and subsequent routine groundwater monitoring data from monitoring wells were reviewed to facilitate development of the Investigation Work Plans. The previously collected data provides valuable information on the overall subsurface conditions, including hydrogeology and contaminant distribution within groundwater. The data collected under this investigation supplements the historical groundwater data and provides SWMU-specific information regarding contaminant occurrence and distribution within soils and groundwater.

3.3 Collection and Management of Investigation Derived Waste

Drill cuttings, excess sample material and decontamination fluids, and all other investigation derived waste (IDW) associated with soil borings were contained and characterized using methods based on the boring locations and type of contaminants suspected or encountered. All drill cuttings generated during the investigation at the Aeration Basin and the OAPIS were collected and put into 55-gallon drums. A composite sample of all 10 drums was collected using a decontaminated stainless steel spoon and sent to Hall Environmental Laboratory for waste characterization analysis. The sample was analyzed for Reactivity, Corrosivity, and Ignitability (RCI), RCRA 8 (TCLP) Metals, TCLP Volatiles (Method 1311 / 8260), TCLP Semi-volatiles (Method 1311 / 8270), and Total Petroleum Hydrocarbon (TPH) (Method 8015B). The Hall analytical report (# 1208B78) is indicated in Appendix E.

Based on the analysis, ten non-hazardous/non-regulated drums (2.7 cubic yards) were shipped off-site to Advanced Chemical Treatment Facility for disposal. All purge water and decontamination water was collected in 55-gallon drums and disposed in the refinery wastewater system located upstream of the API Separator.

3.4 Surveys

A hand held GPS receiver was used to record the coordinates of each soil boring. These coordinates were recorded on the field boring logs. The monitoring well location was subsequently surveyed by a registered surveyor.

The horizontal coordinates, the top of the monitoring well casing, and the ground surface at the monitoring well location were determined by a registered New Mexico professional land surveyor in accordance with the State Plane Coordinate System (NMSA 1978 47-1-49-56 (Repl. Pamp. 1993)). The surveys were conducted in accordance with Sections 500.1 through 500.12 of the Regulations and Rules of the Board of Registration for Professional Engineers and Surveyors Minimum Standards for Surveying in New Mexico.

Section 4
Field Investigation Results

This section provides a summary of the surface and subsurface conditions at the refinery, including the area near SWMUs No. 1 and 14. A discussion is included on the installation of soil borings, field screening of soils, and collection of soil samples for analysis. This is followed by a description of the installation of permanent and temporary well completions and the collection of groundwater samples.

4.1 Surface Conditions

A topographic map of the area near the Aeration Basin and OAPIS is included as Figure 4. Local site topographic features include high ground in the southeast gradually decreasing to a lowland fluvial plain in the northwest. Elevations on the refinery property range from 7,040 feet to 6,860 feet. The area of the site near the Aeration Basin and the OAPIS is at an approximate elevation of 6,910 feet above mean sea level (msl).

The soils in the immediate vicinity of the Aeration Basin include two soil types. The McKinley County soil survey indicates that the soil type changes near the midline across the aeration lagoons. Surface soils from the northern section of the aeration lagoons and evaporation ponds are primarily Rehobeth silty clay loam (USDA, 2005). Rehobeth soil properties include a pH ranging from 8 to 9 standard units and salinity (naturally occurring) typically measuring up to approximately 8 mmhos/cm. The Rehobeth soils are described as having a geomorphic position *"within flood plains and stream terraces on valley floors*." The parent material is described as "*stream alluvium derived from gypsiferous shale*." The permeability is "*slow*" (0.06 in/hr). The typical profile is as follows*:*

A (mineral horizon) — 0 to 2 inches; silty clay loam

Bw (B soil horizon, color or structure, but little illuvial accumulation) — 2 to 5 inches; silty clay loam

Bss (B soil horizon, alluvial accumulation) — 5 to 12 inches; clay

Bssny1 (B soil horizon, alluvial accumulation, sodium, gypsum) —12 to 18 inches; clay

Bssny2 (B soil horizon, alluvial accumulation, sodium, gypsum) —18 to 32 inches; clay

Bssny3 (B soil horizon, alluvial accumulation, sodium, gypsum) — 32 to 80 inches; clay

The southern end of the aeration lagoons and the OAPIS are mapped as being constructed within the bordering Simitarq-Celavar sandy loams. Simitarq soils have nearly neutral pH values ranging from 7.2 to 7.4 standard units. The geomorphic position is described as "*summits on mesas and dipslopes on cuestas*", with a parent material of eolian material and slope alluvium over residuum derived from sandstone. The permeability is described as moderate (0.6 in/hour). The "t*ypical profile" is as follows:*

Oi (organic soil horizon, slightly decomposed)—0 to 1 inches;

A (mineral soil horizon) —1 to 2 inches; sandy loam

Bt (B soil horizon, argillic) — 2 to 11 inches; sandy clay loam

Btk1(B soil horizon, argillic, accumulation of calcium carbonate) — 11 to 27 inches; sandy clay loam

Btk2(B soil horizon, argillic, accumulation of calcium carbonate) —2 7 to 31 inches; sandy clay loam

R (bedrock) — 31 inches; sandstone bedrock

Regional surface water features include the refinery evaporation ponds and several small ponds (one cattle water pond and two small unnamed spring-fed ponds). Average annual rainfall is less than 10 inches per year, thus there are not many natural surface water bodies in this area. The site is located in the Rio Puerco valley, north of the Zuni Uplift with overland flows directed northward to the tributaries of the Rio Puerco river. The Rio Puerco river continues to the east to the confluence with the Rio Grande river. The South Fork of the Rio Puerco river is intermittent and retains flow only during and immediately following precipitation events.

There is very little vegetation throughout the area surrounding the Aeration Basin and OAPIS, with most surfaces composed of nearly bare dirt, gravel, concrete, or asphalt. The area between the refinery and the Rio Puerco River does have limited vegetation.

4.2 Subsurface Conditions

An underground pipeline is present in the western side of the Aeration Basin, which could act as a preferential pathway for contaminant migration to the west; however, it reaches the land surface only a short distance west of the Aeration Basin (Figure 2). Most of the other pipelines near the Aeration Basin and OAPIS are above ground but there are two (inlet and outlet) underground lines buried at a shallow depth near the OAPIS as indicated on Figure 3.

4.2.1 Geology

The shallow subsurface geology consists of fluvial and alluvial deposits comprised of clay and silt with minor inter-bedded sand layers, which overlie mudstone bedrock. These deposits are described in more detail below in descending order.

The Quaternary alluvium, which occurs at the land surface in the area of the Aeration Basin and OAPIS, is mapped regionally as a narrow band trending west-northwest and running just north of I-40 (Figure 5). The Quaternary alluvium is thought to be the parent material of the Rehobeth soils discussed above in Section 4.1. Two cross sections of the shallow subsurface in the immediate vicinity of the Aeration Basin and OAPIS are included as Figures 7 and Figure 8. As shown on the cross sections, the predominant lithology is silty clay with minor amounts of sand in varying proportions. Thin clayey sand lenses up to three to five feet in thickness are observed in the soil borings completed near the Aeration Basin and OAPIS, but the lenses are discontinuous. An isopach map of higher permeable materials (e.g., sand and gravel) was prepared for the sediments that immediately overlie the bedrock to determine if there is a laterally continuous layer of permeable materials present capable of transmitting groundwater and potential contaminants away from the Aeration Basin and/or OAPIS (Figure 9). As shown on the isopach map, there is not a laterally continuous layer of higher permeable materials present on top of the bedrock surface in the immediate vicinity of the Aeration Basin and the OAPIS. This is in contrast to the area further northwest near the Land Treatment Unit (LTU) where a sand layer up to 10 to 15 feet thick has been identified immediately overlying the bedrock (Precision Engineering, 1996). In the area of the LTU, a second sand layer up to 10 feet thick has also been identified, which is separated from the lower sand by a clay layer of 5 to 10 feet in the southern portion of the LTU. As shown on Figure 6 (Cross Section A-A'), these two sand bodies occur at a significantly lower elevation than the thin sand intervals identified near the Aeration Basin and OAPIS and do not appear to be stratigraphically equivalent.

A paleotopographic map, which is based on the current elevation of the top of the bedrock, was prepared to facilitate the evaluation of the deposition of the Quaternary alluvium (Figure 10). The surface of the bedrock slopes to the west and appears to be fairly uniform beneath the Aeration Basin. There is a significant depression of the surface elevation closer to the OAPIS as indicated in boring SWMU 14-1 and a second depressed area, possibly to a lesser extent, near the northwest corner of the Aeration Basin (boring SWMU 1-24). There is no obvious

correlation between the surface of the bedrock and the presence of higher permeable materials in the overlying alluvium based on the available information.

Subcropping beneath the Quaternary alluvium is the Triassic Chinle Group, which is most likely the parent material of the Simitarq soils described above in Section 4.1 (Figure 5). The stratigraphy of the Chinle Group was described in detail for the nearby Fort Wingate quadrangle by Lucas et al, 1997. The Painted Desert Member of the Petrified Forest Formation is the uppermost member of the Chinle Group present in the area of the refinery. The Painted Desert Member is described as reddish-brown and grayish red mudstone with minor beds of resistant, laminated or crossbedded, litharenite. This is consistent with the bedrock encountered at the refinery, as depicted on cross sections A-A', B-B', and C-C' (Figures 6, 7 and 8). Beneath the Painted Desert Member is the Sonsela Member, which is described by Lucas et al (1997) as gray to yellowish-brown, fine-grained to conglomeratic, crossbedded sandstone. The base of the Sonsela Member is recognized as a basin wide unconformity, which was termed the Tr-4 unconformity (Heckert and Lucas, 1996). The Blue Mesa Member, which underlies the Sonsela Member, is the lowest member of the Petrified Forest Formation and the lowest mappable unit shown on cross section A-A' (Figure 6). The Blue Mesa Member is described as mostly purple and greenish-gray mudstone.

4.2.2 Hydrogeology

As discussed above in Section 2.1.3, previous investigations of the occurrence of shallow groundwater near the Aeration Basin identified various groundwater-bearing units where more permeable horizons (e.g., clayey sand/sandy clay) are present within the generally low permeability deposits of the Quaternary alluvium. Generally, the potentiometric surface of the shallow groundwater in monitoring wells at the refinery follows the land surface (Figure 11). The presence of shallow groundwater in the area of the Aeration Basin and OAPIS appears to be associated with fluids managed in these two SWMUs. All of the deeper soil borings immediately surrounding the Aeration Basin encountered saturation or at least moist conditions where more permeable horizons (e.g., clayey sand) were present at elevations at or below the water levels in the Aeration Basin (Figure 7). Saturation was not encountered in similarly permeable soils at elevations above the water levels in the Aeration Basin, nor are any of the measured water levels in the shallow wells above the water levels in the Aeration Basin. Saturation was not encountered in borings (e.g., SWMU 14-1, SWMU 14-6, SWMU 14-7, SWMU 1-20, and SWMU 1-38) located further away from the Aeration Basin and OAPIS, with the exception of boring

SWMU 14-23. There was an indication of saturation within a sandy clay interval in SWMU 14-23; however, no water was produced from a temporary well completion installed in the soil boring. In addition, as discussed above in Section 2.1.3, there have been low concentrations of constituents reported in shallow groundwater from samples collected nearby the Aeration Basin and OAPIS that have also been detected in water and sediment samples collected from the Aeration Basin. All of the evidence points to the Aeration Basin in particular as a source of recharge to the discontinuous permeable zones (e.g., clayey sand) that have been identified in borings adjacent to the Aeration Basin. These saturated intervals produce very little water. Temporary well completions were installed in soil borings SWMU 1-2, SWMU 1-3, SWMU 1-4, SWMU 1-5, SWMU 1-6, SWMU 1-7, SWMU 1-8, SWMU 1-24, and SWMU 14-3. In every case, it was difficult to obtain sufficient volumes of water to complete scheduled sample collection activities and at SWMU 1-5, there was not a sufficient volume of water to allow analyses for all analytes.

The diverse properties and complex, irregular stratigraphy of the Quaternary alluvium across the refinery cause a wide range of hydraulic conductivity ranging from less than 10^{-2} cm/sec for gravel like sands immediately overlying the Painted Desert Formation to 10^{-8} cm/sec in the clay soils located near the surface (Western Refining, 2009). Permeability tests performed on the Quaternary alluvium beneath the nearby LTU indicated an average permeability of 1.9E-05 cm/sec (Appendix C). Permeability tests performed on soils in the area of the firewater pond indicated an average permeability of 1.1E-07 cm/sec (Appendix C).

As described above, the bedrock (i.e., Petrified Forest Formation) is mainly composed of low permeability materials (e.g., mudstone) with the exception of the Sonsela Member and some thinner sandstones within the overlying Painted Desert Member. Yield tests, including slug tests and pumping tests have been performed at the refinery to estimate the hydraulic conductivity of the Painted Desert Member (Appendix C). A slug test performed on July 3, 1984 in well OW-4 indicated a hydraulic conductivity of 4.0E-7 cm/sec. A pump test was performed in well OW-24 on February 20, 1985 and it yielded a hydraulic conductivity of 2.5E-7 cm/sec. The Painted Desert Member appears to be a competent aquitard to reduce the potential for downward migration of contaminants from groundwater that may occur within the overlying Quaternary alluvium.

The Sonsela Member is identified as the uppermost aquifer for RCRA monitoring purposes at the LTU because the overlying groundwater bearing units are not capable of supplying sufficient

quantities of groundwater to meet the definitions of an aquifer. Wells completed in a thinner permeable sandstone layer within the Painted Desert Member are also monitored near the LTU as a potential early warning network. The Sonsela's highest point occurs southeast of the site and slopes downward to the northwest as it passes under the refinery. The Sonsela Member forms a water-bearing reservoir with artesian conditions throughout the central and western portions of the refinery property (Western, 2009). Aquifer test of the Sonsela Member conducted northeast of Prewitt indicated a transmissivity of greater than 100 ft^2/day (Stone and others, 1983). Yield tests conducted at the site have shown a much lower hydraulic conductivity of 0.34 ft/day (1.2E-04 cm/sec) (Appendix C).

4.3 Exploratory Drilling Investigations, Soil Sampling and Boring Abandonment

This subsection provides a description of surface and subsurface investigations to locate potential impacts to soils and also the potential for soil impacts to have migrated vertically to the underlying groundwater. This includes soil field screening results, soil sampling intervals and methods for detection of surface and subsurface impacts in soils.

4.3.1 Aeration Basin Soil Investigation

The deeper soil borings (i.e., those scheduled to penetrate deeper than two feet) were drilled using the hollow-stem auger (HSA) method and a general description of the exploratory drilling activities is as follows. The drilling equipment was decontaminated between each borehole, as described in Appendix B. All deep soil borings were drilled to the top of saturation and extended deeper if multiple zones of saturation were encountered to reach the sand layer identified in GWM-1 at a depth of 21.5 feet, which lies on top of the Petrified Forest Formation (i.e., bedrock). All of the originally scheduled deep soil borings (i.e., SWMU 1-1 through SWMU 1-8) and three additional deep borings (SMWU 1-20, SWMU 1-37, and SWMU 1-38) reached the top of bedrock. One additional deep soil boring (SWMU 1-24) did not reach bedrock but was terminated after drilling to a depth of 34 feet with steadily decreasing signs of potential impacts based on field screening and penetrating six feet below the bottom of saturation.

Discrete soil samples were collected for laboratory analyses at the following intervals:

- 0-6" (at soil borings with evidence of significant impacts near the land surface and all hand auger locations);
- 18-24" (at soil borings with evidence of significant impacts near the land surface and all hand auger locations, except where refusal was reached at a shallower depth);

- > 24” (from the interval in each soil boring with the greatest apparent degree of contamination, based on field observations and field screening);
- From a one-foot interval, which lies approximately five feet below the bottom of the Aeration Basin (all deep soil borings);
- From the bottom of each borehole (all soil borings);
- From the 6” interval at the top of saturation (all borings that encountered saturated soils) and
- Many additional soil samples were collected from:
    - zones that are sandy or silty;
    - intervals with apparent impacts based on field screening in addition to the interval with the greatest apparent impacts; and
    - in borings with multiple saturated intervals, soils samples were collected from each discrete saturated interval.

The installation of soil borings and collection of soil samples is discussed below in numerical order for the samples collected near the Aeration Basin. A description of the field screening and soil sampling procedures are presented in Appendix B – Field Methods. Copies of the boring logs are provided in Appendix D. In addition to being included on the soil boring logs, the soil vapor (i.e., headspace) screening results are summarized in Table 3. The locations of the soil borings appear on Figure 2.

<u>SWMU 1-1</u>

On October 5, 2012 the drilling rig was set up on location SWMU 1-1. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 2 - 4 feet, 10 - 12 feet and 13 - 14 feet bgl. Petroleum hydrocarbon odor and elevated photoionization detector (PID) readings were observed from 2 - 14 feet bgl. Discoloration (i.e., black staining) was observed from 2 - 4 feet bgl.

The lithology encountered consisted of surficial silty clay fill from 0 - 4 feet bgl. There was no recovery in the interval from 4 - 6 feet bgl. Soft, low plastic clay was encountered from 6 - 8 feet bgl. A very stiff, high plastic clay was encountered from 8 - 13 feet bgl. A very dense, dry, gray sandstone (Chinle Group- Painted Desert Member) was encountered from 13 - 14 feet bgl. The sampling terminated at 14 feet bgl. A temporary PVC well was installed with the screened interval ranging from 3 to 8 feet. No groundwater was detected in the temporary well. On October 9, 2012 the well was removed, the borehole was re-reamed and a temporary PVC well

was reset with 10 feet of screen set from 2 - 12 feet. No groundwater was detected in the well. The well was pulled and the borehole was grouted on October 11, 2012.

SWMU 1-2

On October 2, 2012 the drilling rig was set up on location SWMU 1-2. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 6 - 8 feet bgl, 10 - 11 feet bgl, 14 - 16 feet bgl, 17 - 17.25 feet bgl and 19.5 - 20 feet bgl. No odors were evident from 0 - 16 feet bgl. Petroleum hydrocarbon odors were evident from 16 - 19.5 feet bgl. The highest PID reading (7.2 ppm) was observed from 17 - 17.25 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 8 feet bgl. There was no recovery in the interval from 8 - 10 feet bgl, (the empty sampling spoon was dripping with water). Saturated, fine grain clayey sand was encountered from 10 - 11.5 feet bgl. Moderate to low plastic clay was encountered from 11.5 - 12 feet bgl. Reddish brown, high plastic, firm clay was encountered from 12 - 14 feet bgl. A saturated, fine grain, clayey sand was encountered from 14 - 16 feet bgl. High plastic, firm, brown clay was encountered from 16 - 19.5 feet bgl. Two saturated, clayey sand seams were observed within the clay at 17 - 17.25 feet bgl and 18.50 - 18.75 feet bgl. A dense, dry, gray/reddish brown mudstone /sandstone (Painted Desert Member of Petrified Forest Formation) was encountered from 19.5 - 20 feet bgl. The sampling terminated at 20 feet bgl. A groundwater sample was collected from within the augers and the borehole was grouted.

SWMU 1-3

On October 2, 2012 the drilling rig was set up on location SWMU 1-3. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 2 - 4 feet bgl, 10 - 11 feet bgl, 11 - 11.25 feet bgl, 18.5 - 19.25 feet bgl and 19.5 - 20 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-3. The highest PID reading (21.3 ppm) was observed from 2 - 4 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 11 feet bgl. A saturated, clayey sand seam was encountered from 11 - 11.25 feet bgl. High plastic, firm, reddish brown clay was encountered from 11.25 - 17 feet bgl. A damp to saturated, sandy clay / clayey sand was encountered from 17 - 19.5 feet bgl. A very dense, dry, reddish brown mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 19.5 - 20 feet bgl. The

sampling terminated at 20 feet bgl. A temporary well was installed at this location with the screened interval ranging from 15 - 20 feet bgl. A groundwater sample was collected on October 3, 2012. The well was pulled and the borehole was grouted.

SWMU 1-4

On October 3, 2012 the drilling rig was set up on location SWMU 1-4. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 8 - 10 feet bgl, 10 - 12 feet bgl (duplicate), 17 - 18 feet bgl, and 23 - 24 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from 0 - 14 feet bgl. Petroleum hydrocarbon odors were evident in the samples collected from 16 - 23 feet bgl. The highest PID reading (16.4 ppm) was observed from 17 - 18 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 10 feet bgl. A moist to saturated, clayey sand seam was encountered from 10 - 12 feet bgl. Silty clay was encountered from 12 - 14 feet bgl. There was no recovery in the interval from 14 - 16 feet bgl. Silty clay with black staining was encountered from 16 - 17 feet bgl. Moist to saturated sandy clay / clayey sand was encountered from 17 - 20 feet bgl. High plastic, reddish brown clay was encountered from 20 - 23 feet bgl. A dry, reddish brown / gray mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 23 - 24 feet bgl. The sampling terminated at 24 feet bgl. A temporary well was installed at this location with the screened interval ranging from 16 - 21 feet bgl. A groundwater sample (volatiles and semi-volatiles) was collected on October 4, 2012. A groundwater sample (metals) was collected on October 5, 2012. The well was pulled and the borehole was grouted.

SWMU 1-5

On October 3, 2012 the drilling rig was set up on location SWMU 1-5. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Six soil samples were collected from 10 - 12 feet bgl, 14 - 16 feet bgl, 16 - 18 feet bgl, 24 - 25 feet bgl, 26 - 27 feet bgl and 27 - 28 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-5. The highest PID reading (16.1 ppm) was observed from 16 - 18 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 10 feet bgl. Clayey sand / silty clay / sandy clay was encountered from 10 - 16 feet bgl. A low plastic, gravelly clay was encountered from 16 - 26 feet bgl. Saturated, clayey sand was encountered from 26 - 27 feet bgl. A very dense, dry, gray, weathered mudstone (Painted Desert Member of Petrified Forest

Formation) was encountered from 27 - 28 feet bgl. The sampling terminated at 28 feet bgl. A temporary well was installed on October 4, 2012 at this location with the screened interval ranging from 23 - 28 feet bgl. A groundwater sample (volatiles and semi-volatiles) was collected on October 5, 2012. The well was pulled and the borehole was grouted.

SWMU 1-6

On October 4, 2012 the drilling rig was set up on location SWMU 1-6. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Six soil samples were collected from 2 - 4 feet bgl (duplicate), 4 - 6 feet bgl, 7.5 - 8 feet bgl, 10 - 11 feet bgl and 11 - 12 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-6. The highest PID reading (37.5 ppm) was observed from 2 - 4 feet bgl.

The lithology encountered consisted of surficial silty clay / gravel from 0 - 4 feet bgl. Saturated clayey sand was encountered from 4 - 7.5 feet bgl. Silty clay was encountered from 7.5 - 9 feet bgl. Saturated clayey sand was encountered from 9 - 11 feet bgl. A very dense, dry, reddish brown and gray mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 11 - 12 feet bgl. The sampling terminated at 12 feet bgl. A temporary well was installed with the screened interval ranging from 7 - 12 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-7

On October 4, 2012 the drilling rig was set up on location SWMU 1-7. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 12 - 14 feet bgl, 14 - 16 feet bgl, and 16 - 18 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-7. The highest PID reading (7.6 ppm) was observed from 0 - 2 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 12 feet bgl. High plastic clay with saturated clayey sand seams was encountered from 12 - 16 feet bgl. A very dense, dry, reddish brown and gray clay / mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 16 - 18 feet bgl. The sampling terminated at 18 feet bgl. A temporary well was installed with the screened interval ranging from 13 - 18 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-8

On October 5, 2012 the drilling rig was set up on location SWMU 1-8. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Six soil samples were collected from 4 - 6 feet bgl, 10 - 12 feet bgl, 12 - 14 feet bgl, 16 - 18 feet bgl (duplicate) and 19 - 20 feet bgl. Petroleum hydrocarbon odors were evident in the samples collected from 4 - 6 feet bgl and 12 - 19 feet bgl. The highest PID reading (161 ppm) was observed from 12 - 14 feet bgl.

The lithology encountered consisted of surficial silty clay fill from 0 - 4 feet bgl. Saturated clayey sand was encountered from 4 - 6 feet bgl. Silty clay was encountered from 6 - 13 feet bgl. Saturated clayey sand was encountered from 13 - 19 feet bgl. A very dense, dry to damp, reddish brown / gray mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 19 - 20 feet bgl. The sampling terminated at 20 feet bgl. A temporary well was installed with the screened interval ranging from 13 - 18 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-9

On October 15, 2012 location SWMU 1-9 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-9. The highest PID reading (7.0 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 0.5 feet bgl. Silty sand fill was encountered from 0.5 - 1.5 feet bgl. The boring was terminated in silty clay encountered from 1.5 - 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-10

On October 15, 2012 location SWMU 1-10 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-10. The highest PID reading (10.1 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 0.5 feet bgl. Silty sand fill was encountered from 0.5 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-11

On October 15, 2012 location SWMU 1-11 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-11. The highest PID reading (38.9 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-12

On October 15, 2012 location SWMU 1-12 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 0.5 - 1 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-12. The highest PID reading (63 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 1 feet bgl. The boring was terminated at 1 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-13

On October 12, 2012 the drilling rig was set up on location SWMU 1-13. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 2 - 4 feet bgl, and 4 - 6 feet bgl (duplicate). No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-13. The highest PID reading (35.7 ppm) was observed from 2 - 4 feet bgl. The lithology encountered consisted of surficial silty clay fill from 0 - 6 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-14

On October 15, 2012 location SWMU 1-14 was sampled using a hand auger. The samples were collected from the auger bucket. Three soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl (duplicate). Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-14. The highest PID reading (5.7 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silty clay / gravel fill from 0 - 1 feet bgl and

clay fill from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-15

On October 15, 2012 location SWMU 1-15 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-15. The highest PID reading (9.3 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of surficial silt / silty clay fill from 0 - 1 feet bgl and clay fill from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-16

On October 15, 2012 location SWMU 1-16 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-16. The highest PID reading (7.7 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silt / gravel fill from 0 - 1 feet bgl and silty clay / gravel fill from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-17

On October 15, 2012 location SWMU 1-17 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1 - 1.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-17. The highest PID reading (9.5 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silt / gravel fill from 0 - 0.5 feet bgl and silty clay fill from 0.5 - 1.5 feet bgl. The boring was terminated at 1.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-18

On October 16, 2012 location SWMU 1-18 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1 - 1.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from

SWMU 1-18. The highest PID reading (8.2 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silt / gravel fill from 0 - 0.5 feet bgl and silty clay fill from 0.5 - 1.5 feet bgl. The boring was terminated at 1.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-19

On October 16, 2012 location SWMU 1-19 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-19. The PID reading (4.1 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of surficial silt from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-20

On October 11, 2012 the drilling rig was set up on location SWMU 1-20, which was an additional location selected west of the Aeration Basin to help define the lateral extent of potential impacts observed in SWMU 1-4. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl (duplicate), 1.5 - 2 feet bgl, 4 - 6 feet bgl, and 10 - 12 feet bgl (duplicate). No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-20. The highest PID reading (21.7 ppm) was observed from 0 - 2 feet bgl. The lithology encountered consisted of silt / silty clay from 0 - 2 feet bgl. Silty clay was encountered from 2 - 10 feet bgl. A very dense, dry to damp, reddish brown mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 10 - 12 feet bgl. The sampling terminated at 12 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-21

On October 16, 2012 location SWMU 1-21, which was shifted west of the its original location, was sampled with a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl (duplicate). Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-21. A PID reading of 1.4 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silt from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-22

On October 16, 2012 location SWMU 1-22, which was shifted west of its original location, was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-22. The highest PID reading (6.8 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of silt from 0 - 0.5 feet bgl and silty clay from 0.5 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-23

On October 16, 2012 location SWMU 1-23 was sampled using a hand auger. This boring was moved west of its original location due to earlier field indications of potential impacts at SWMU 1-4 and SWMU 1-24. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-23. The PID reading (3.7 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silt /gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-24

On October 8, 2012 the drilling rig was set up on location SWMU 1-24. This location was an additional deep boring installed between SWMU 1-4 to the south and SWMU 1-5 to the north to better define potential impacts in this area. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Seven soil samples were collected from 0 - 0.5 feet bgl (duplicate), 1.5 - 2 feet bgl, 10.5 - 11.5 feet bgl, 16 - 18 feet bgl, 24 - 26 feet bgl and 32 - 34 feet bgl. Petroleum hydrocarbon odors were evident in the samples collected from 18 - 32 feet bgl. The highest PID reading (28 ppm) was observed from 16 - 18 feet bgl.

The lithology encountered consisted of surficial silty clay fill from 0 - 16 feet bgl. Damp, clayey sand was encountered within the silty clay at the 10.5 - 11.5 feet bgl interval. Sandy clay / clayey sand was encountered from 16 - 20 feet bgl. Clayey silt was encountered from 20 - 24 feet bgl. The interval from 24 - 28 feet contained clayey silt and sand and was observed to be saturated to very moist. Black discoloration (possible staining from petroleum hydrocarbons) was also observed from 20 to 34 feet bgl. Damp, very dense clayey sand / gravel was

encountered from 30 - 34 feet bgl. The sampling terminated at 34 feet bgl. A temporary well was installed on October 9, 2012 with the screened interval ranging from 16 - 26 feet bgl. A groundwater sample was collected on October 10, 2012. The well was pulled and the borehole was grouted on October 11, 2012.

SWMU 1-25

On October 16, 2012 location SWMU 1-25 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 0.5 - 1 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-25. The highest PID reading (4.7 ppm) was observed from 0.5 - 1 feet bgl. The lithology encountered consisted of sand / gravel fill from 0 - 1 feet bgl. The boring was terminated at 1 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-26

On October 16, 2012 location SWMU 1-26 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-26. A PID reading of 6.5 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-27

On October 12, 2012 the drilling rig was set up on location SWMU 1-27. This location was originally to be completed with a hand auger, but the drilling rig was used to allow deeper penetration to help define any potential impacts observed in boring SWMU 1-6. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-27. The highest PID reading (18.2 ppm) was observed from 2 - 4 feet bgl. The lithology encountered consisted of silty clay fill from 0 - 4 feet bgl. The sampling terminated at 4 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-28

On October 12, 2012 the drilling rig was set up on location SWMU 1-28. This location was originally to be completed with a hand auger, but the drilling rig was used to allow deeper penetration to help define any potential impacts observed in boring SWMU 1-6. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl (duplicate). No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-28. The highest PID reading (4.8 ppm) was observed from 2 - 4 feet bgl. The lithology encountered consisted of silty clay fill from 0 - 2 feet bgl and clayey gravelly sand from 2 - 4 feet bgl. The sampling terminated at 4 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-29

On October 16, 2012 location SWMU 1-29 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-29. A PID reading of 3.6 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-30

On October 12, 2012 the drilling rig was set up on location SWMU 1-30. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, and 4 - 6 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-30. The highest PID reading (6.7 ppm) was observed from 4 - 6 feet bgl. The lithology encountered consisted of silty clay fill from 0 - 4 feet bgl and clayey sand from 4 - 6 feet bgl. The sampling terminated at 6 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-31

On October 16, 2012 location SWMU 1-31 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-31. A PID reading of 3.9 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted

of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-32

On October 16, 2012 location SWMU 1-32 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl (duplicate). Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-32. A PID reading of 0.7 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-33

On October 16, 2012 location SWMU 1-33 was sampled. Sample collection was accomplished using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-33. A PID reading of 3.1 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-34

On October 16, 2012 location SWMU 1-34 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-34. A PID reading of 3.2 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-35

On October 12, 2012 the drilling rig was set up on location SWMU 1-35. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, and 4 - 6 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-35. The highest PID

reading (4.7 ppm) was observed from 2 - 4 feet bgl. The lithology encountered consisted of silty clay fill from 0 - 4 feet bgl and silty clay / clayey silt from 4 - 6 feet bgl. The sampling terminated at 6 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-36

On October 16, 2012 location SWMU 1-36 was sampled using a hand auger. The sample was collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-36. A PID reading of 1.9 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silty clay / gravel from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 1-37

On October 10, 2012 the drilling rig was set up on location SWMU 1-37. This was an additional deep boring installed southwest of boring SWMU 1-2. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Seven soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 8 - 8.5 feet bgl, 8.5 - 9 feet bgl, 12 - 13 feet bgl, 13 - 14 feet bgl, and 17 - 18 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-37. The highest PID reading (16.6 ppm) was observed from 6 - 8 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 7 feet bgl. High plastic clay was encountered from 7 - 16 feet bgl. Encountered at 8.5 - 9 feet bgl and 12 - 13 feet bgl were saturated clayey sands. No petroleum hydrocarbon discoloration or odors were associated with these sands. The boring was terminated in a very dense, dry, gray, clay / mudstone (Painted Desert Member of Petrified Forest formation). The sampling terminated at 18 feet bgl. A temporary well was installed with the screened interval ranging from 10 - 15 feet bgl. A groundwater sample was collected on October 11, 2012. The well was pulled and the borehole was grouted on October 11, 2012.

SWMU 1-38

On October 11, 2012 the drilling rig was set up on location SWMU 1-38. This additional location was selected west of SWMU1-4 to help define the lateral extent of any impacts observed in borings SWMU 1-4 and 1-24. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl,

1.5 - 2 feet bgl, and 6 - 8 feet bgl. No petroleum hydrocarbon odors were evident in the samples collected from SWMU 1-38. The highest PID reading (11.7 ppm) was observed from 6 - 8 feet bgl. The lithology encountered consisted of silt / silty clay from 0 - 2 feet bgl and silty clay 2 - 6 feet bgl. A very dense, dry, reddish brown / gray, mudstone (Painted Desert Member of Petrified Forest Formation) was encountered from 6 - 8 feet bgl. The sampling terminated at 8 feet bgl. The borehole was plugged with bentonite chips.

SWMU 1-39

On October 16, 2012 location SWMU 1-39 was sampled using a hand auger. The samples were collected from the auger bucket. One soil sample was collected from 0 - 0.5 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 1-39. The PID reading (4.4 ppm) was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of silt / gravel fill from 0 - 0.5 feet bgl. The boring was terminated at 0.5 feet bgl due to refusal in gravel. Soils not used for laboratory analyses were placed back in the borehole.

4.3.2 Old API Separator

The deeper soil borings (i.e., those scheduled to penetrate deeper than two feet) were drilled using the HAS drilling method and a general description of the exploratory drilling activities is as follows. The drilling equipment was decontaminated between each borehole, as described in Appendix B. All scheduled deep soil borings were drilled to a minimum depth of 10 feet pursuant to the investigation work plan with the exception of locations SWMU 14-5 and SWMU 14-8, which had to be installed with a hand auger due to access limitations. None of the soil borings encountered bedrock near the OAPIS even though the boring at SWMU 14-1 reached a depth of 50 feet bgl. Additional soil borings (SWMU 14-6, SWMU 14-21, SWMU 14-22, SWMU 14-23, and SWMU 14-24) were completed to delineate the lateral extent of potential impacts to the east, south, and west of the OAPIS.

Discrete soil samples were collected for laboratory analysis from the following intervals:

- 0-0.5’ (all borings);
- 1.5-2.0’ (all borings except SWMU 14-20 where refusal was reached at a depth of 1 foot);
- From the 6” interval at the top of saturation, if encountered;

- A sample from each boring in the interval with the greatest apparent degree of contamination, based on field observations and field screening;
- The 6" interval at the bottom of each boring except SWMU 14-23 where there was no sample recovery in the bottom 4 foot of the boring; however, saturation was encountered in this boring and a sample was collected from the 6" interval at the top of saturation instead pursuant to the investigation work plan; and
- Additional soil samples were collected from:
  - Zones that are sandy or silty; and
  - Intervals with apparent impacts based on field screening in addition to the interval with the greatest apparent impacts

The installation of soil borings and collection of soil samples is discussed below in numerical order for the samples collected near the OAPIS. A description of the field screening and soil sampling procedures are presented in Appendix B – Field Methods. Copies of the boring logs are provided in Appendix D. In addition to being included on the soil boring logs, the soil vapor (i.e., headspace) screening results are summarized in Table 3. The locations of the soil borings appear on Figure 3.

SWMU 14-1

On July 16, 2012 the drilling rig was set up on location SWMU 14-1. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from the following intervals on July 16, 2012; 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, and 10 - 12 feet bgl. Sampling was stopped for the day at 30 feet bgl.

On July 17, 2012 the crew returned to SWMU 14-1. There was no groundwater observed in the borehole. Sampling resumed and an additional sample was collected from the interval 48 - 50 feet bgl. The sampling was terminated at 50 feet bgl.

No petroleum hydrocarbon odors were observed in the soil samples from SWMU 14-1. The highest PID reading (105.9 ppm) was observed from 10 - 12 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 8 feet bgl. High plastic clay was encountered from 8 - 12 feet bgl. A low to moderate plastic silty clay was encountered from 12 - 36 feet bgl. A fine grain, poorly cemented, reddish brown sandstone was encountered from 36 - 38 feet bgl. Encountered from 38 to 50 feet bgl was silty clay / clay with low plasticity and very stiff. The borehole was grouted on July 18, 2012.

SWMU 14-2

On July 17, 2012 the drilling rig was set up on location SWMU 14-2. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Six soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 8 - 10 feet bgl (duplicate), 16 - 18 feet bgl, and 24 - 25 feet bgl. Petroleum hydrocarbon odors were evident in the samples collected from 1.5 - 13 feet bgl. Discoloration (black staining) was apparent from 1.5 - 13 feet bgl. The highest PID reading (330 ppm) was observed from 8 - 10 feet bgl.

The lithology encountered consisted of surficial clay / gravel from 0 - 1.5 feet bgl. Moderate plastic clay was encountered from 1.5 - 2 feet bgl. Low plastic, silty clay was encountered from 2 - 13 feet bgl. Moderate plastic, stiff, reddish brown clay was encountered from 13 - 25 feet bgl. A temporary PVC well screen was installed on July 17 and it was replaced with a permanent well completion on July 19, 2012.

SWMU 14-3

On July 18, 2012 the drilling rig was set up on location SWMU 14-3. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 8 - 10 feet bgl, 12 - 14 feet bgl, and 25.5 - 26 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 2 - 20 feet bgl. Discoloration (black staining) was apparent from 2 - 14 feet bgl. The highest PID reading (343 ppm) was observed from 8 - 10 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 14 feet bgl. Moderate plastic clay was encountered from 14 - 24 feet bgl. Groundwater was observed in the sampling spoon from the 14 - 16 feet bgl interval. Low plastic silty clay was encountered from 24 - 26 feet bgl. The sampling was terminated at 26 feet bgl. A groundwater sample was collected from the augers. The borehole was grouted.

SWMU 14-4

On July 17, 2012 the drilling rig was set up on location SWMU 14-4. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Four soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 10 - 12 feet bgl, and 19.5 - 20 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 6 - 14 feet bgl. Discoloration was apparent from 8 - 10 feet bgl. The highest PID reading (711 ppm) was observed from 10 - 12 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 14 feet bgl. Moderate plastic clay was encountered from 14 - 20 feet bgl. The sampling was terminated at 20 feet bgl. Groundwater was not observed in this boring.

SWMU 14-5

On July 19, 2012 location SWMU 14-5 was sampled using a hand auger. The samples were collected from the auger bucket. Three soil samples were collected from 0 - 0.5 feet bgl (duplicate) and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors were not evident in the samples collected from SWMU 14-5. The highest PID reading (7.4 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of gravel / clay from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-6

On October 9, 2012 the drilling rig was set up on location SWMU 14-6. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Four soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 10 - 12 feet bgl, and 17 - 18 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 4 - 14 feet bgl. Discoloration (black staining) was apparent from 4 - 8 feet bgl. The highest PID reading (367 ppm) was observed from 10 - 12 feet bgl.

The lithology encountered consisted of surficial silty clay from 0 - 8 feet bgl. A high plastic clay was encountered from 8 - 18 feet bgl. Sampling was terminated at 18 feet bgl and the borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-7

On July 18, 2012 the drilling rig was set up on location SWMU 14-7. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Four soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 6 - 8 feet bgl, and 23.5 - 24 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 0 - 18 feet bgl. The highest PID reading (935 ppm) was observed from 6 - 8 feet bgl.

The lithology encountered consisted of gravel / clay fill from 0 - 2 feet bgl and then silty clay from 2 - 6 feet bgl. High plastic clay was encountered from 6 - 16 feet bgl. Clayey sand / sandy clay was encountered from 16 - 20 feet bgl. High plastic, very stiff, dry, reddish brown clay was

encountered from 20 to 24 feet bgl. The sampling was terminated at 24 feet bgl and the borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-8

On July 19, 2012 location SWMU 14-8 was sampled using a hand auger. The samples were collected from the auger bucket. Three soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl (duplicate). Petroleum hydrocarbon odors and discoloration were evident in the samples collected from 0 - 2 feet bgl. The highest PID reading (3,717 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of gravel / clay / sand from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-9

On July 18, 2012 the drilling rig was set up on location SWMU 14-9. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl (duplicate), 1.5 - 2 feet bgl, 4 - 6 feet bgl, and 13 - 14 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 1 - 8 feet bgl. The highest PID reading (1959 ppm) was observed from 4 - 6 feet bgl.

The lithology encountered consisted of silt / gravel / clay fill from 0 - 4 feet bgl. A moderate to low plastic sandy / silty clay was encountered from 4 - 10 feet bgl. High plastic, stiff, brown clay was encountered from 10 - 13 feet bgl. The sampling was terminated at 14 feet bgl in low plastic, stiff, silty clay. The borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-10

On July 19, 2012 location SWMU 14-10 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the samples collected from SWMU 14-10. The highest PID reading (0.4 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of gravel / clay fill from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-11

On July 19, 2012 location SWMU 14-11 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the samples collected from SWMU 14-11. The highest PID reading (38.5 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of gravel / clay fill from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-12

On July 19, 2012 location SWMU 14-12 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the samples collected from 0 - 2 feet bgl. The highest PID reading (1,094 ppm) was observed from 1.5 - 2 feet bgl. The lithology encountered consisted of high plastic, soft clay from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-13

On July 19, 2012 location SWMU 14-13 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the samples collected from 0 - 2 feet bgl. The highest PID reading (975 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of high plastic, soft clay from 0 - 2 feet bgl with a sand lens present from 0.75 - 1.25 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-14

On July 19, 2012 location SWMU 14-14 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the samples collected from 0 - 2 feet bgl. The highest PID reading (1,028 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of low plastic, soft clay from

0 - 1 feet bgl and fine grain clayey sand from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-15

On July 19, 2012 location SWMU 14-15 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the sample collected from 1 - 2 feet bgl. The highest PID reading (5,000 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of sandy fill from 0 - 1 feet bgl and fine grain clayey sand from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-16

On July 19, 2012 location SWMU 14-16 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the sample collected from 1 - 2 feet bgl. The highest PID reading (375.5 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of silt / sand fill from 0 - 1 feet bgl and high plastic clay from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-17

On July 19, 2012 location SWMU 14-17 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were evident in the sample collected from 1 - 2 feet bgl. The highest PID reading (898 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of silt / clay fill from 0 - 1 feet bgl and high plastic clay from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-18

On July 19, 2012 location SWMU 14-18 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. Petroleum hydrocarbon odors and discoloration (e.g., black staining) were

evident in the sample collected from 1 - 2 feet bgl. The highest PID reading (2,537 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of silt / sand / gravel fill from 0 - 1 feet bgl and fine grain clayey sand from 1 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-19

On July 19, 2012 location SWMU 14-19 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors or discoloration (e.g., black staining) were evident in the samples collected from SWMU 14-19. The highest PID reading (5.1 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of silt / sand / clay fill from 0 - 2 feet bgl. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-20

On July 19, 2012 location SWMU 14-20 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl (duplicate). No petroleum hydrocarbon odors or discoloration were evident in the sample collected from SWMU 14-20. A PID reading of 2.0 ppm was observed from 0 - 0.5 feet bgl. The lithology encountered consisted of very compacted gravel / sand fill. The boring was terminated at 0.5 feet bgl due to refusal. Soils not used for laboratory analyses were placed back in the borehole.

SWMU 14-21

On October 9, 2012 the drilling rig was set up on location SWMU 14-21. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Three soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, and 8 - 10 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the sample collected from SWMU 14-21. The highest PID reading (10.5 ppm) was observed from 0 - 1 feet bgl.

The lithology encountered consisted of low plastic silty clay from 0 - 10 feet bgl. The sampling was terminated at 10 feet bgl and the borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-22

On October 9, 2012 the drilling rig was set up on location SWMU 14-22. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Five soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 4 - 6 feet bgl (duplicate) and 8 - 10 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the sample collected from SWMU 14-22. The highest PID reading (7.9 ppm) was observed from 4 - 6 feet bgl.

The lithology encountered consisted of low to moderate plastic silty clay from 0 - 10 feet bgl. The sampling was terminated at 10 feet bgl and the borehole was grouted. Groundwater was not observed in this boring.

SWMU 14-23

On October 10, 2012 the drilling rig was set up on location SWMU 14-23. Sample collection was accomplished using the HSA drilling method and split spoon samplers. Four soil samples were collected from 0 - 0.5 feet bgl, 1.5 - 2 feet bgl, 12 - 14 feet bgl, and 14 - 16 feet bgl. Petroleum hydrocarbon odors were apparent in the samples collected from 6 - 18 feet bgl. The highest PID reading (398 ppm) was observed from 12 - 14 feet bgl.

The lithology encountered consisted of silty clay fill from 0 - 6 feet bgl. A clayey silt / sand was encountered from 6 - 8 feet bgl. Moderate plastic, silty clay was encountered from 8 - 10 feet bgl. A high plastic silty clay was encountered from 10 - 16 feet bgl. Moderate plastic, very dense sandy clay was encountered from 16 to18 feet bgl with water observed within the sampling spoon. There was no recovery of the samples collected from 18 - 22 feet bgl. The boring was terminated at 22 feet bgl. A temporary well was installed with the screened interval being set from 15 - 20 feet bgl. The formation did not yield water to the well. The well was pulled on October 11, 2012 and the borehole was grouted.

SWMU 14-24

On October 17, 2012 location SWMU 14-24 was sampled using a hand auger. The samples were collected from the auger bucket. Two soil samples were collected from 0 - 0.5 feet bgl and 1.5 - 2 feet bgl. No petroleum hydrocarbon odors or discoloration were evident in the samples collected from SWMU 14-24. The highest PID reading (4.0 ppm) was observed from 1 - 2 feet bgl. The lithology encountered consisted of a low plastic silty clay. The boring was terminated at 2 feet bgl. Soils not used for laboratory analyses were placed back in the borehole.

4.4 Monitoring Well Construction and Groundwater Sampling

This section describes the methods and details of monitoring well construction and the collection of groundwater samples. The description includes the dates of well construction. The wells and groundwater samples are discussed in numerical order of the associated soil borings. Copies of the boring and well construction logs are provided in Appendix D. The well development and purging procedures and groundwater sample collection procedures are discussed in Appendix B. The locations of the monitoring wells and borings from which groundwater samples were collected appear on Figures 2 and 3.

4.4.1 Aeration Basin

SWMU 1-2

On October 2, 2012 the drilling rig was set up on location SWMU 1-2. The soil boring was drilled using the HSA drilling method. Saturated, fine grain clayey sand was encountered from 10 - 11.5 feet bgl. A saturated, fine grain, clayey sand was encountered from 14 - 16 feet bgl. Two saturated, clayey sand seams were observed within the clay at 17 - 17.25 feet bgl and 18.50 - 18.75 feet bgl. The boring was terminated in dense, dry, gray/reddish brown mudstone /sandstone (Petrified Forest Formation) at 20 feet bgl. A groundwater sample was collected from within the augers and the borehole was grouted.

SWMU 1-3

On October 2, 2012 the drilling rig was set up on location SWMU 1-3. The boring was completed using the HSA drilling method. A saturated, clayey sand seam was encountered from 11 - 11.25 feet bgl. A damp to saturated, sandy clay / clayey sand was encountered from 17 - 19.5 feet bgl. The boring was terminated in very dense, dry, reddish brown mudstone (Petrified Forest Formation) –at a depth of 20 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed at this location with the screened interval ranging from 15 - 20 feet bgl. A groundwater sample was collected on October 3, 2012. The well was pulled and the borehole was grouted.

SWMU 1-4

On October 3, 2012 the drilling rig was set up on location SWMU 1-4. The HSA drilling method was used to drill the soil boring. A moist to saturated, clayey sand seam was encountered from 10 - 12 feet bgl. Moist to saturated sandy clay / clayey sand was encountered from 17 - 20 feet

bgl. The boring was terminated in dry, reddish brown / gray mudstone (Petrified Forest Formation) –at a depth of 24 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed at this location with the screened interval ranging from 16 - 21 feet bgl. A groundwater sample (volatiles and semi-volatiles only were collected due to low sample volume) was collected on October 4, 2012. A groundwater sample (metals) was collected on October 5, 2012. The well was pulled and the borehole was grouted.

SWMU 1-5

On October 3, 2012 the drilling rig was set up on location SWMU 1-5. The soil boring was drilled using the HSA drilling method. Saturated, clayey sand was encountered from 26 - 27 feet bgl. The boring was terminated in very dense, dry, gray, weathered mudstone (Petrified Forest Formation) –at a depth of 28 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed on October 4, 2012 at this location with the screened interval ranging from 23 - 28 feet bgl. A groundwater sample (volatiles and semi-volatiles only due to low sample volume) was collected on October 5, 2012. The well was pulled and the borehole was grouted.

SWMU 1-6

On October 4, 2012 the drilling rig was set up on location SWMU 1-6. The boring was completed using the HSA drilling method. Saturated clayey sand was encountered from 4 - 7.5 feet bgl and 9 - 11 feet bgl. The borehole was terminated in very dense, dry, reddish brown and gray mudstone (Petrified Forest Formation) –at a depth of 12 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 7 - 12 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-7

On October 4, 2012 the drilling rig was set up on location SWMU 1-7. The HSA drilling method was used to drill the soil boring. High plastic clay with saturated clayey sand seams was encountered from 12 - 16 feet bgl. The boring was terminated in very dense, dry, reddish brown and gray clay / mudstone (Petrified Forest Formation) –at a depth of 18 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 13 - 18 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-8

On October 5, 2012 the drilling rig was set up on location SWMU 1-8. The soil boring was completed using the HSA drilling method. Saturated clayey sand was encountered from 4 - 6 feet bgl and from 13 - 19 feet bgl. The boring was terminated in very dense, dry to damp, reddish brown / gray mudstone (Petrified Forest Formation) –at a depth of 20 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 13 - 18 feet bgl. A groundwater sample was collected. The well was pulled and the borehole was grouted on October 5, 2012.

SWMU 1-24

On October 8, 2012 the drilling rig was set up on location SWMU 1-24. This location was an additional deep boring installed between SWMU 1-4 to the south and SWMU 1-5 to the north to better define potential impacts in this area. The boring was completed using the HSA drilling method. Damp, clayey sand was encountered within the silty clay at the 10.5 - 11.5 feet bgl interval. The interval from 24 - 28 feet contained clayey silt and sand and was observed to be saturated to very moist. Damp, very dense clayey sand / gravel was encountered from 30 - 34 feet bgl. The boring terminated at 34 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed on October 9, 2012 with the screened interval ranging from 16 - 26 feet bgl. A groundwater sample was collected on October 10, 2012. The well was pulled and the borehole was grouted on October 11, 2012.

SWMU 1-37

On October 10, 2012 the drilling rig was set up on location SWMU 1-37. This was an additional deep boring installed southwest of boring SWMU1-2. The boring was completed using the HSA drilling method. Encountered at 8.5 - 9 feet bgl and 12 - 13 feet bgl were saturated clayey sands. The boring was terminated in a very dense, dry, gray, clay / mudstone (Petrified Forest Formation) 18 feet bgl. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 10 - 15 feet bgl. A groundwater sample was collected on October 11, 2012. The well was pulled and the borehole was grouted on October 11, 2012.

4.4.2 Old API Separator

SWMU 14-2 / OAPIS-1

On July 17, 2012 the drilling rig was set up on location SWMU 14-2. The boring was installed using the HSA drilling method. No damp or saturated intervals were encountered during drilling. A temporary well screen (two-inch rigid PVC with 0.01 inch slots) was installed with the screened interval ranging from 15 - 25 feet bgl. Water slowly entered the temporary well screen and on July 19, 2012 a groundwater sample was collected from the well. The temporary PVC well was pulled on July 19, 2012.

A permanent well was subsequently installed at this location on July 19, 2012. In order to accommodate the screen placement, the borehole was advanced to a depth of 26 feet bgl. Slotted (0.01 inch) 2-inch rigid PVC well screen was placed at the bottom of the boring and extended for 10 feet (16.0 to 26.0 feet) to ensure that the entire saturated zone was open to the monitoring well. The 10/30 sand filter pack was installed to 2.0 feet over the top of the screen. As the sand was installed in the well bore the hollow stem augers were removed. Approximately 14 feet of bentonite was placed over the filter pack and hydrated. The surface completion consists of a stickup completion, which includes a protective PVC casing with cap that was secured in the concrete pad.

SWMU 14-3

On July 18, 2012 the drilling rig was set up on location SWMU 14-3. The boring was installed using the HSA drilling method. Groundwater was observed in the sampling spoon from the 14 - 16 feet bgl interval, while no particular zone of saturation was observed while drilling the boring. The boring was terminated at 26 feet bgl. A groundwater sample was collected from the augers and the borehole was grouted to the surface on the same day.

Section 5
Regulatory Criteria

The applicable screening and potential cleanup levels are specified in NMED's *Risk Assessment Guidance for Site Investigations and Remediation* dated February 2012, updated June 2012 and in the Environmental Protection Agency's (EPA) Regional Screening Levels dated November 2012.

For non-residential properties (e.g., the Gallup Refinery), the soil screening levels must be protective of construction workers throughout the upper ten feet based on NMED criteria. NMED residential soil screening levels are applied to the upper ten feet and soil screening levels for protection of groundwater apply throughout the vadose zone. EPA soil screening levels for direct contact exposure apply to the upper two feet of the vadose zone. To achieve closure as "corrective action complete without controls", the affected media must meet residential screening levels, which are presented in Table 4. Table 5 provides a list of the available NMED and EPA soil screening levels for non-residential properties. While Tables 4 and 5 indicate the various depths to which the individual soil screening levels are applicable, Tables 7 and 8 discussed below does not include this level of detail.

The groundwater cleanup levels are based on New Mexico Water Quality Control Commission (WQCC) standards (20.6.2.7 WW NMAC, 20.6.2.3103, and 20.6.2.4103) unless there is a federal maximum contaminant level (MCL), in which case the lower of the two values is selected as the cleanup level. If neither a WCQQ standard nor an MCL is available, then the cleanup level is based on a NMED Tap Water Screening Level. If a NMED Tap Water Screening Level is not available for a constituent, then an EPA Regional Screening Level is used. If an EPA Regional Screening Level is for a carcinogenic compound, then the screening level is multiplied by 10 to bring the risk level to 1E-05 to be consistent with the NMED screening levels. Table 6 presents the groundwater cleanup levels, with the applicable cleanup level highlighted.

The aforementioned Tables 4 and 5 have soil screening levels for the soil-to-groundwater pathway that are based on a dilution/attenuation factor (DAF) of 1.0 and 461. The soil screening level based on a DAF of 1.0 is a reference value only used to document the final calculation of site-specific soil screening levels. A review of site conditions indicates that a DAF of 1.0 is overly conservative, thus a site-specific DAF value was calculated. The documentation of the calculation of the site-specific DAF value is provided in Appendix C.

The screening levels that are compared to individual soil sample results from SWMU No. 1 (Aeration Basin) are presented in Table 7 and the soil samples results for SWMU No. 14 (OAPIS) are presented in Table 8. The screening levels included in Table 7 and 8 are based on residential and non-residential land use and include a screening level to evaluate the potential for constituents to migrate to groundwater using a site-specific DAF. For the non-residential screening levels, the construction worker scenario screening levels for each constituent is included in the data tables if NMED screening levels are available. If NMED soil screening levels are not available for a particular constituent, then EPA soils screening levels are used. If an EPA soil screening level is for a carcinogenic compound, then the screening level is multiplied by 10 to bring the risk level to 1E-05 to be consistent with the NMED screening levels. The screening levels in Tables 7 and 8 have not been segregated based on depth of the soil sample as discussed above for Tables 4 and 5. The screening levels that are compared to individual groundwater sample results from SWMU No. 1 (Aeration Basin) are presented in Table 9 and the groundwater samples results for SWMU No. 14 (OAPIS) are presented in Table 10. It should also be noted that the soil sample results for chromium are compared to the screening levels for both chromium III and VI, as speciation has not been conducted to determine if the detected chromium is chromium III or chromium VI.

A review of the NMED guidelines for TPH indicates that the TPH screening levels were developed based on screening levels and compositional assumptions developed by the Massachusetts Department of Environmental Protection (MADEP). The analytical results, as presented in Tables 7 and 8, are reported for gasoline range organics (C6-C10), diesel range organics (>C10-C28), and motor oil range organics (>C28-C35). The applicable TPH screening levels for comparison to the individual samples are selected from Table 6-2 of the NMED guidance.

There are no soil screening levels for gasoline range organics and the individual compounds listed for groundwater (gasoline range criteria) are included in the list of analytes used for site samples. As there could have been a variety of petroleum types (e.g., crude oil or various refined products) going to the OAPIS and Aeration Basin, the screening level for “unknown oil” was selected for comparison to the diesel and motor oil range soil ~~and groundwater~~ analytical results.

~~The laboratory analyses for motor oil range organics only report results for >C28 to C35. Since the motor oil range results only include hydrocarbons greater than C28, it is not appropriate to~~

~~compare the results against screening levels for product types that have lower hydrocarbon ranges (e.g., diesel fuel – 60% C11-C22 aromatics and 40% C9-C18 aliphatics). The only product type in Table 6-2 that contains the >C28-C35 carbon range is "waste oil", which includes C19-C36. Therefore, the motor oil range organic soil analytical results are compared to the "waste oil" soil screening levels. The NMED guidance specifies the inclusion of "petroleum-related contaminants" as the groundwater criteria for waste oil instead of a motor oil range screening level and these constituents are included in the list of reported analytes in Tables 9 and 10.~~

Some of the individual constituents reported by the laboratory do not have screening levels but were all non-detect with respect to soil, except 4-isopropyltoluene, 4-nitrophenol, 3+4-methylphenol, and sec-butylbenzene. With respect to groundwater, there were also detections of constituents that do not have screening levels. The constituents detected in groundwater that do not have screening levels include, 4-isopropyltoluene, 3+4-methylphenol, 2-nitrophenol, 4-nitrophenol, sec-butylbenzene. None of these 10 constituents are classified as a carcinogen.

Section 6
Site Impacts

This section discusses the chemical analyses performed and presents the analytical results that were obtained through the analysis of soil and groundwater samples, which were collected at the Aeration Basin and OAPIS. The results for soils and groundwater analyses are presented and compared to applicable screening levels, as described in Section 5.0.

6.1 Soil Analytical Results

Soil samples were analyzed by Hall Environmental Analysis Laboratory in Albuquerque, New Mexico using the following methods for organic constituents:

- SW-846 Method 8260 volatile organic compounds;
- SW-846 Method 8270 semi-volatile organic compounds; and
- SW-846 Method 8015B gasoline, diesel, and motor oil range petroleum hydrocarbons.

Soil samples were analyzed for the following metals using the indicated analytical methods, respectively.

Analyte	Analytical Method
Antimony	SW-846 method 6010
Arsenic	SW-846 method 6010
Barium	SW-846 method 6010
Beryllium	SW-846 method 6010
Cadmium	SW-846 method 6010
Chromium	SW-846 method 6010
Cobalt	SW-846 method 6010
Cyanide	SW-846 method 335.3/335.2 mod
Iron	SW-846 method 6010
Lead	SW-846 method 6010
Mercury	SW-846 method 7470/7471
Manganese	SW-846 method 6010
Nickel	SW-846 method 6010
Selenium	SW-846 method 6010
Silver	SW-846 method 6010
Vanadium	SW-846 method 6010
Zinc	SW-846 method 6010

The analytical results for soil samples collected at the Aeration Basin are summarized in Table 7 and the results for soils collected at the OAPIS are summarized in Table 8. The individual results that exceed the applicable cleanup levels are highlighted, as noted in the table footnotes. Maps showing the distribution of constituents detected in soils above the lowest applicable screening levels are included as Figures 12 – 29. The concentrations shown on Figures 12 – 29 that exceed the screening levels in Tables 7 and 8 are underlined on the figures [i.e., concentrations above residential and/or DAF (461) screening levels]. The laboratory analytical reports are included in Appendix E and the data validation of the results, which includes the analytical results for the associated QA/QC samples, is included in Appendix F.

The constituents that have concentrations in soils above screening levels as measured in samples collected from within either the Aeration Basin or the OAPIS are discussed below. The results for the Aeration Basin are presented first, followed by the results for the OAPIS.

6.1.1 Aeration Basin Soil Results

1,2,4-Trimethlybenzene was detected in one sample [SWMU 1-1 (2-4')] at a concentration above the DAF screening level (9.68 mg/kg) but none of the results exceed the residential screening level (62 mg/kg). The detected concentrations range from 0.00104 mg/kg to 44 mg/kg and are shown on Figure 12.

1-Methylnaphthalene was detected in two soil samples [SWMU 1-1 (2 - 4') and SWMU 1-1 (10 - 12')] at concentrations above the DAF screening level of 2.35 mg/kg. The detected concentrations range from 0.0456 to 35 mg/kg and do not exceed either the residential or non-residential (i.e., construction worker) screening levels. The analytical results are shown on Figure 13.

Benzene was detected in two soil samples [SWMU 1-1 (2 - 4') and SWMU 1-28 (1.5 - 2.0')] at concentrations above the DAF screening level (0.796 mg/kg) but none of the results exceed the residential or non-residential soil screening levels. The detected concentrations range from 0.00109 mg/kg to 3.2 mg/kg and are presented on Figure 14.

Naphthalene was detected in one sample [SWMU 1-1 (2 - 4')] at a concentration of 13 mg/kg, which exceeds the DAF screening level of 1.64 mg/kg, but does not exceed the residential or non-residential screening levels. The naphthalene concentrations are shown on Figure 15.

Diesel Range Organics (DRO) was detected in one sample [SWMU 1-1 (2 - 4')] at a concentration of 4,700 mg/kg, which exceeds the screening level of 1,000 mg/kg. The detected results ranged from 12 to 4,700 mg/kg and are shown on Figure 16.

Arsenic was detected in three soil samples at concentrations above the residential soil screening level of 3.9 mg/kg. These reported concentrations of 4.6 mg/kg, 4.7 mg/kg and 4.9 mg/kg, which are all estimated values due to the values being less than the practical quantitation limit, occur in samples SWMU 1-16 (7.5-8.0'), SWMU 1-17 (0-0.5'), and SWMU 1-18 (0-0.5'), respectively.

6.1.2 Old API Separator Soil Results

1,1,2-Trichloroethane was detected in one sample [SWMU 14-17 (1.5 – 2')] at a concentration (1.0 mg/kg), which exceeds the DAF screening level (0.0514 mg/kg) but did not exceed the residential or non-residential screening levels. The 1,1,2-trichloroethane analytical results are shown on Figure 17.

1,2,4-Trimethlybenzene was detected in eight samples [SWMU 14-6 (10 - 12'), SWMU 14-7 (6 - 8'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-14 (0 - 0.5'), SWMU 14-15 (1.5 – 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 – 2.0')] at concentrations above the DAF screening level (9.68 mg/kg) but none exceed the residential or non-residential screening levels. The detected concentrations range from 0.000507 mg/kg to 44 mg/kg and are shown on Figure 18.

1,2-Dibromo-3-chloropropane was detected in three samples [SWMU 14-7 (0 - 0.5'), SWMU 14-7 (1.5 – 2.0'), and SWMU 14-12 (0 – 0.5')] at concentrations above the residential and DAF screening levels in one sample but only above the DAF screening level in two of the samples. The detected concentrations range from 0.000593 mg/kg to 2.2 mg/kg and are shown on Figure 19.

1,2-Dibromoethane (EDB) was detected in 18 samples [SWMU 14-2 (1.5 – 2.0'), SWMU 14-2 (8 - 10'), SWMU 14-3 (12 - 14'), SWMU 14-3 (8 - 10'), SWMU 14-4 (10 - 12'), SWMU 14-7 (0 - .5'), SWMU 14-7 (6 - 8'), SWMU 14-8 (1.5 -2.0'), SWMU 14-9 (4 - 6'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-13 (0 - 0.5'), SWMU 14-13 (1.5 – 2.0'), SWMU 14-14 (0 - 0.5'), SWMU 14-14 (1.5 – 2.0'), SWMU 14-16 (1.5 – 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 – 2.0')] at concentrations above the DAF screening level (0.0071 mg/kg)

with three sample results above the residential screening level. The detected concentrations range from 0.12 mg/kg to 1.2 mg/kg and are shown on Figure 20.

1,2-Dichloropropane was detected in two samples [SWMU 14-12 (0 – 0.5') and SWMU14-18 (1.5 – 2.0')] at concentrations above the DAF screening level (0.494 mg/kg) but none exceed the residential or non-residential screening levels. The detected concentrations range from 0.089 mg/kg to 0.82 mg/kg and are shown on Figure 21.

1-Methylnaphthalene was detected in 18 samples [SWMU 14-2 (1.5 – 2.0'), SWMU 14-2 (8 -10'), SWMU 14-3 (12 - 14'), SWMU 14-3 (8 - 10'), SWMU 14-4 (10 - 12'), SWMU 14-6 (10 - 12'), SWMU 14-7 (6 - 8'), SWMU 14-9 (4 - 6'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 - 2.0'), SWMU 14-13 (0 - 0.5'), SWMU 14-13 (1.5 – 2.0'), SWMU 14-14 (0 - 0.5'), SWMU 14-14 (1.5 - 2.0'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-16 (1.5 – 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 -2.0')] at concentrations above the DAF screening level (2.35 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.000458 mg/kg to 45 mg/kg and are shown on Figure 22.

2-Methylnaphthalene was detected in one sample [SWMU 14-4 (10 – 12')] at a concentration of 90.0 mg/kg, which exceeds the DAF screening level (64.5 mg/kg) but did not exceed the residential or non-residential screening levels. The 2-methylnaphthalene analytical results are shown on Figure 23.

Benzene was detected in nine samples [SWMU 14-6 (10 - 12'), SWMU 14-7 (6-8'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-14 (1.5 – 2.0'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-17 (1.5 – 2.0'), SWMU 14-18 (1.5 – 2.0'), and SWMU 14-23 (12 - 14')] at concentrations above the DAF screening level (0.796 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.00072 mg/kg to 5.9 mg/kg and are shown on Figure 24.

Ethylbenzene was detected in six samples [SWMU 14-6 (10 - 12'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 – 2.0')] at concentrations above the DAF screening level (5.98 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.000542 mg/kg to 23 mg/kg and are shown on Figure 25.

Naphthalene was detected in 14 samples [SWMU 14-2 (8 - 10'), SWMU 14-3 (12 - 14'), SWMU 14-3 (8 - 10'), SWMU 14-4 (10 - 12'), SWMU 14-6 (10 - 12'), SWMU 14-7 (6 - 8'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-13 (0 - 0.5'), SWMU 14-14 (0 - 0.5'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-16 (1.5 – 2.0'), SWMU 14-17 (1.5 – 2.0'), and SWMU 14-18 (1.5 - 2.0')] at concentrations above the DAF screening level (1.64 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.000458 mg/kg to 17 mg/kg and are shown on Figure 26.

Xylenes were detected in two samples [SWMU 14-12 (0 - 0.5'), and SWMU 14-15 (1.5 - 2.0')] at concentrations above the DAF screening level (72.1 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.00282 mg/kg to120 mg/kg and are shown on Figure 27.

Bis(2-chloroethyl)ether was detected in two samples [SWMU 14-9 (4 - 6') and SWMU 14-15 (1.5 - 2.0')] at concentrations above the DAF screening level (0.0121 mg/kg), but none exceed the non-residential or residential screening levels. The detected concentrations range from 0.18 mg/kg to 0.43 mg/kg and are shown on Figure 28.

DRO was detected in 21 samples [SWMU 14-2 (1.5 – 2.0'), SWMU 14-2 (8 - 10'), SWMU 14-3 (8 - 10'), SWMU 14-6 (10 - 12'), SWMU 14-7 (0 - 0.5'), SWMU 14-7 (1.5 – 2.0'), SWMU 14-8 (1.5 – 2.0'), SWMU 14-9 (1.5 – 2.0'), SWMU 14-9 (4 - 6'), SWMU 14-12 (0 - 0.5'), SWMU 14-12 (1.5 – 2.0'), SWMU 14-13 (1.5 – 2.0'), SWMU 14-14 (0 - 0.5'), SWMU 14-14 (1.5 – 2.0'), SWMU 14-15 (0 - 0.5'), SWMU 14-15 (1.5 - 2.0'), SWMU 14-16 (1.5 – 2'), SWMU 14-7 (0 - 0.5'), SWMU 14-17 (1.5 – 2.0'), SWMU 14-18 (0 - 0.5'), and SWMU 14-18 (1.5 – 2.0')] at concentrations above the screening level (1,000 mg/kg). The detected concentrations range from 19 mg/kg to 15,000 mg/kg and are shown on Figure 29.

Arsenic was detected in eight soil samples at concentrations ranging from 1.6 to 3.0 mg/kg. All of these results are less than the lowest screening level (residential) of 3.9 mg/kg. They are also estimated values as they were detected at concentrations less than the practical quantitation limit.

6.2 Groundwater Analytical Results

The groundwater samples were analyzed for organic constituents by the following methods:

- SW-846 Method 8260 volatile organic compounds;

- SW-846 Method 8270 semi-volatile organic compounds; and
- SW-846 Method 8015B gasoline, diesel, and motor oil range organics.

Groundwater samples were analyzed for the following metals using the indicated analytical methods.

Analyte	Analytical Method
Antimony	SW-846 method 200.8
Arsenic	SW-846 method 200.8
Barium	SW-846 method 200.7
Beryllium	SW-846 method 200.7
Cadmium	SW-846 method 200.7
Chromium	SW-846 method 200.7
Cobalt	SW-846 method 200.7
Cyanide	SW*--846 method 335.3/335.2 mod
Lead	SW-846 method 200.8
Mercury	SW-846 method 200.7
Nickel	SW-846 method 200.7
Selenium	SW-846 method 200.8
Silver	SW-846 method 200.7
Vanadium	SW-846 method 200.7
Zinc	SW-846 method 200.7

In addition, groundwater samples were analyzed for chloride, fluoride, and sulfate using EPA method 300.

The analytical results and the applicable cleanup levels are presented in Tables 9 and 10. The individual results that exceed the applicable cleanup levels are highlighted. Maps depicting the distribution of the various constituents detected in groundwater samples above the screening levels are provided in Figures 30 and 31. The concentrations shown on Figures 30 and 31 that exceed the screening levels are underlined on the figures. The results for the associated QA/QC samples and the data validation are provided in Appendix F. The laboratory analytical reports are included in Appendix E.

6.2.1 Aeration Basin Groundwater Results

All of the groundwater samples collected at the Aeration Basin were collected from temporary well completions and there are numerous metals detected at concentrations above their

respective screening levels. Arsenic was detected above the screening level of 0.01 mg/l in seven samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-4 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0082 mg/l to 0.063 mg/l and are shown on Figure 30.

Barium was detected above the screening level of 1.0 mg/l in six samples (SWMU 1-2 GW, SWMU 1-4 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.24 mg/l to 56 mg/l and are shown on Figure 30.

Beryllium was detected above the screening level of 0.004 mg/l in six samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0065 mg/l to 0.21 mg/l.

Chromium (total) was detected above the screening level of 0.05 mg/l in five samples (SWMU 1-2 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.015 mg/l to 0.31 mg/l.

Cobalt was detected above the screening level of 0.05 mg/l in five samples (SWMU 1-2 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.011 mg/l to 0.53 mg/l.

Iron (total) was detected above the screening level of 1.0 mg/l in seven samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, SWMU 1-24 GW, and SWMU 1-37 GW). The detected concentrations range from 0.32 mg/l to 160 mg/l.

Lead was detected above the screening level of 0.015 mg/l in six samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0041 mg/l to 1.7 mg/l and are shown on Figure 30.

Manganese was detected above the screening level of 0.2 mg/l in seven samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-4 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-8 GW, SWMU 1-24 GW, and SWMU 1-37 GW). The detected concentrations range from 0.99 mg/l to 95 mg/l and are shown on Figure 30.

Nickel was detected above the screening level of 0.2 mg/l in six samples (SWMU 1-2 GW, SWMU 1-3 GW, SWMU 1-6 GW, SWMU 1-7 GW, SWMU 1-24 GW, and SWMU 1-37 GW). The detected concentrations range from 0.11 mg/l to 0.95 mg/l and are shown on Figure 30.

Selenium was detected above the screening level of 0.05 mg/l in one sample (SWMU 1-2 GW). The detected concentrations range from 0.0072 mg/l to 0.059 mg/l.

Vanadium was detected above the screening level of 0.183 mg/l in one sample (SWMU 1-24 GW). Only the one sample had a detected concentration of 0.2 mg/l.

Fluoride was detected above the screening level of 1.6 mg/l in four samples (SWMU 1-2 GW, SWMU 1-4 GW, SWMU 1-6 GW, and SWMU 1-24 GW). The detected concentrations range from 0.78 mg/l to 13 mg/l.

1,2,4-Trimethylbenzene was detected above the screening level of 0.015 mg/l in one sample (SWMU 1-4 GW). The detected concentrations range from 0.0069 mg/l to 0.032 mg/l and are shown on Figure 31.

1-Methylnaphthalene was detected above the screening level of 0.0097 mg/l in three samples (SWMU 1-4 GW, SWMU 1-8 GW and SWMU 1-24). The detected concentrations range from 0.0098 mg/l to 0.011 mg/l and are shown on Figure 31.

Benzene was detected above the screening level of 0.005 mg/l in three samples (SWMU 1-2 GW, SWMU 1-4 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0011 mg/l to 0.024 mg/l and are shown on Figure 31.

Methyl tert-butyl ether (MTBE) was detected above the screening level of 0.125 mg/l in two samples (SWMU 1-8 GW and SWMU 1-37 GW). The detected concentrations range from 0.014 mg/l to 0.31 mg/l and are shown on Figure 31.

Naphthalene was detected above the screening level of 0.00143 mg/l in three samples (SWMU 1-4 GW, SWMU 1-8 GW, and SWMU 1-24 GW). The detected concentrations range from 0.0023 mg/l to 0.032 mg/l and are shown on Figure 31.

2,4-Dimethylphenol was detected above the screening level of 0.73 mg/l in one sample (SWMU 1-4 GW). The detected concentrations range from 0.026 mg/l to 0.85 mg/l and are shown on Figure 31.

DRO was detected at elevated concentrations~~above the screening level of 0.2 mg/l~~ in four samples (SWMU 1-4 GW, SWMU 1-6 GW, SWMU 1-24 GW, and SWMU 1-37 GW). The detected concentrations range from 1.0 mg/l to 4.4 mg/l and the results are shown on Figure 31.

6.2.2 Old API Separator Groundwater Results

Two of the groundwater samples (SWMU 14-2 GW and SWMU 14-3 GW) were collected from temporary well completions and a third groundwater sample (SWMU 14-OAPIS-1 GW) was collected from a permanent well completion installed in soil boring SWMU 14-2. There are numerous metals detected at concentrations above their respective screening levels in the two groundwater samples collected from the temporary well completions, but only two metals above screening levels in the sample collected from the permanent well. Arsenic was detected above the screening level of 0.01 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.012 mg/l to 0.024 mg/l and are shown on Figure 30.

Barium was detected above the screening level of 1.0 mg/l in one sample (SWMU 14-3 GW). The detected concentrations range from 0.54 mg/l to 2.8 mg/l and are shown on Figure 30.

Beryllium was detected above the screening level of 0.004 mg/l in one sample (SWMU 14-3 GW). The detected concentrations range from 0.0021 mg/l to 0.042 mg/l.

Chromium (total) was detected above the screening level of 0.05 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.012 mg/l to 0.38 mg/l.

Cobalt was detected above the screening level of 0.05 mg/l in one sample (SWMU 14-3 GW). The detected concentrations range from 0.038 mg/l to 0.12 mg/l.

Cyanide was detected above the screening level of 0.2 mg/l in one sample (SWMU 14-2 GW). The detected concentrations range from 0.09 mg/l to 0.216 mg/l.

Iron was detected above the screening level of 1.0 mg/l in three samples (SWMU 14-2 GW, SWMU 14-3 GW, and SWMU 14-OAPIS-1 GW). The detected concentrations range from 5.6 mg/l to 120 mg/l.

Lead was detected above the screening level of 0.015 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.044 mg/l to 0.19 mg/l and are shown on Figure 30.

Manganese was detected above the screening level of 0.2 mg/l in three samples (SWMU 14-2 GW, SWMU 14-3 GW, and SWMU 14-OAPIS-1 GW). The detected concentrations range from 1.3 mg/l to 45 mg/l and are shown on Figure 30.

Vanadium was detected above the screening level of 0.183 mg/l in one sample (SWMU 14-3 GW). The detected concentrations range from 0.029 mg/l to 0.52 mg/l.

I,2,4-Trimethylbenzene was detected above the screening level of 0.015 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.082 mg/l to 0.085 mg/l and are shown on Figure 31.

1-Methylnaphthalene was detected above the screening level of 0.0097 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.061 mg/l to 0.17 mg/l and are shown on Figure 31.

2-Methylnaphthalene was detected above the screening level of 0.027 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.039 mg/l to 0.11 mg/l and are shown on Figure 31.

Benzene was detected above the screening level of 0.005 mg/l in three samples (SWMU 14-2 GW, SWMU 14-3 GW, and SWMU 14-OAPIS-1 GW). The detected concentrations range from 0.013 mg/l to 0.097 mg/l and are shown on Figure 31.

MTBE was detected above the screening level of 0.125 mg/l in three samples (SWMU 14-2 GW SWMU 14-3 GW, and SWMU 14-OAPIS-1 GW). The detected concentrations range from 0.25 mg/l to 0.44 mg/l and are shown on Figure 31.

Methylene chloride was detected above the screening level of 0.005 mg/l in one sample (SWMU 14-3 GW). It was detected in only the one sample at a concentration of 0.0075 mg/l.

Naphthalene was detected above the screening level of 0.00143 mg/l in two samples (SWMU 14-2 GW and SWMU 14-3 GW). The detected concentrations range from 0.042 mg/l to 0.045 mg/l and are shown on Figure 31.

DRO was detected at elevated concentrations ~~above the screening level of 0.2 mg/l~~ in two samples (SWMU 14-2 GW and SWMU 14-OAPIS-1 GW). The detected concentrations range from 6.5 mg/l to 83 mg/l and are shown on Figure 31.

6.3 General Groundwater Chemistry

The measurement of field purging parameters included measurement of groundwater pH, specific conductance, dissolved oxygen concentrations, oxidation-reduction potential, and

temperature. The results of the measurements are included in Table 11 and fluid levels measured prior to purging are presented in Table 2.

Section 7
Conclusions and Recommendations

This section summarizes and provides an evaluation of the potential impacts as shown in field screening data and analytical data. This is followed by recommendations for any future actions.

7.1 Conclusions

A cumulative risk evaluation for soils is presented in Tables 12 and 13 for SWMUs No. 1 and No. 14, respectively. As directed by NMED, the soil analytical results for sample SWMU 1-1 (2-4') has also been included in the SWMU 14 soil results due to its location near to SWMU 14. The evaluation was conducted by taking the maximum reported soil concentration of each detected constituent and dividing by the residential screening level and non-residential screening levels as shown in the equations below. These calculations are separated for carcinogenic and non-carcinogenic constituents. The cumulative carcinogenic risk is 1.36 x 10^{-3} assuming residential land use and 6.3 x 10^{-5} for non-residential land use at SWMU No. 1. The cumulative carcinogenic risk is 1.41 x 10^{-3} assuming residential land use and 6.93 x 10^{-5} for non-residential land use at SWMU No. 14. The hazard index for residential land use is 0.~~77~~56 and for non-residential land use is 0.1~~48~~26 at SWMU No. 1. The hazard index for residential land use is 1.~~5~~30 and for non-residential land use is 0.384~~405~~ at SWMU No. 14.

$$Site\ Risk = \left(\frac{conc_x}{SSL_x} + \frac{conc_y}{SSL_y} + \frac{conc_z}{SSL_z} + \cdots + \frac{conc_i}{SSL_i}\right) \times 10^{-5}$$

$$Site\ Hazard\ Index\ (HI) = \left(\frac{conc_x}{SSL_x} + \frac{conc_y}{SSL_y} + \frac{conc_z}{SSL_z} + \cdots + \frac{conc_i}{SSL_i}\right) \times 1$$

A cumulative risk evaluation for groundwater is presented in Tables 14 and 15 for SWMUs No. 1 and No. 14, respectively. The evaluation was conducted by taking the maximum reported concentration of each constituent detected in groundwater, which is based on the totals analyses for metals, and dividing by the risk-based residential screening levels, as shown in the equation above in the discussion for soil. The cumulative carcinogenic risk level is calculated to be 1.74~~3.82~~ x 10^{-3}~~4~~ for SWMU No. 1 and 1.48~~8.78~~ x 10^{-3}~~4~~ for SWMU No. 14. The hazard index is 147.04 for SWMU 1 and 79.55 for SWMU 14.

7.1.1 Aeration Basin

Soils

Four organic constituents (1,2,4-trimethylbenzene, 1-methylnaphthalene, benzene, and naphthalene), and DRO were detected in three soil samples at concentrations exceeding their respective DAF soil screening levels. Two of the soil samples with constituents detected at concentrations above the DAF screening levels are found in soil boring SWMU 1-1, which is located on the southeastern boundary of the Aeration Basin. The sample intervals with concentrations above the DAF screening level include 2-4' and 10-12', with most exceedences in the 2-4' interval. The 2-4' interval is logged as fill material composed of silty clay and the deeper 10-12' interval is clay. This boring was terminated at 14 feet, after encountering bedrock at 13' bgl. There was no indication of saturated conditions in this boring; however, contaminants have migrated to this location immediately adjacent to the Aeration Basin. Similar constituents are found in soils investigated a short distance to the south, near the OAPIS (see Section 7.1.2 below).

Benzene was the only constituent detected above the DAF screening level in soil boring SWMU 1-28 at a depth of 1.5 – 2.0' bgl (2.53 mg/kg vs. 0.796 mg/kg). Soil boring SWMU 1-28 is located on the northern boundary of the Aeration Basin and the 1.5 – 2.0' interval is composed of a clayey gravelly sand, which was damp, but not saturated. The boring was terminated at 4 feet bgl in the same material. The PID readings were low and there was no odor throughout the boring. Boring SWMU 1-28 was originally scheduled as a hand auger location, but it was completed with the HSA drilling rig to allow penetration below 2 feet in order to assess potential impacts observed in the adjacent deep soil boring (SWMU 1-6). Boring SWMU 1-6 had an elevated PID reading of 37.5 ppm in the 2-4 interval; however, no constituents exceeded any of the soil screening levels in the soil samples collected from 2-4' or 4-6' intervals in boring SWMU 1-6.

Overall, there were few exceedences of the DAF screening levels in the soil samples collected around the Aeration Basin. Only 3 (SWMU 1-1 (2-4'), SWMU 1-1 (10-12'), and SWMU 1-28 (1.5-2') out of 103 soil samples collected around the Aeration Basin exceeded DAF screening levels. The vertical impacts to soil were found to extend to the uppermost groundwater-bearing horizons in some borings around the Aeration Basin as discussed below.

Groundwater

There are a seemingly large number of metals detected at concentrations above residential / tap water screening levels in groundwater samples collected from the soil borings that surround the Aeration Basin. The metal screening levels were exceeded in every soil boring from which a groundwater sample was collected. It is possible that these results are affected by high turbidity levels in the water samples collected from the temporary well completions installed in the soil borings.

Seven organic constituents (1-methylnaphthalene, 2-methylnaphthalene, 1,2,4-trimethlybenzene, benzene, MTBE, naphthalene, and 2,4-dimethylphenol), and DRO were detected in groundwater samples collected from soil borings at concentrations above screening levels. At least one organic constituent was found at concentrations above the screening levels in borings SWMU 1-2, SWMU 1-4, SWMU 1-6, SWMU 1-8, SWMU 1-24, and SWMU 1-37. Soil boring SWMU 1-1 was installed near the southeast corner of the Aeration Basin and encountered bedrock at a depth of 13 feet bgl, but groundwater was not present at this location.

Soil boring SWMU 1-2 was drilled along the southwest side of the Aeration Basin and encountered bedrock at a depth of 19.5 feet bgl. There were several saturated soil intervals encountered in this boring including clayey sand from 8 to 11 feet, 14 to16 feet, 17 to 17.25 feet, and 18.25 to18.5 feet bgl. Benzene was the only organic constituent detected at a concentration above the screening level in SWMU 1-2 (0.017 mg/l vs. 0.005 mg/l). Additional soil boring SWMU 1-37 was installed southwest of the Aeration Basin to delineate potential impacts observed when drilling soil boring SWMU 1-2. Benzene did decrease to below the screening level in the groundwater sample collected at SWMU 1-37, but MTBE increased to a concentration slightly over the screening level (0.13 mg/l vs. 0.125 mg/l) and DRO was detected at 1.0 mg/l, which exceeds the screening level of 0.2 mg/l. In boring SWMU 1-37, bedrock was encountered at 16 feet bgl and two intervals of saturated clayey sand were present at 8.5 - 9 feet and 12 - 13 feet bgl.

Moving further around the edge of the Aeration Basin to just north of the southwest corner, SWMU 1-3 was drilled to bedrock at a depth of 19.5 feet bgl. A thin clayey sand zone at 11-11.25 feet and a second at 18-19.5 feet were both saturated in boring SWMU 1-3. None of the organic constituents exceeded their screening levels at SWMU 1-3. The stratigraphic relationship between the clayey sand zones appearing in SWMU 1-2, SWMU 1-3, SWMU 1-24, and SWMU 1-5 appear on cross section C-C’ (Figure 8).

The next deep soil boring drilled (SWMU 1-4) is located further north, on the west side of the Aeration Basin. This boring encountered bedrock at a depth of 23 feet bgl and had saturated intervals of clayey sand at 10-12 feet and clayey sand/sandy clay at 17-20 feet bgl. Six organic constituents (benzene, 2,4-dimethylphenol, 1-methylnaphthalene, 2-methylnaphthalene, 1,2,4-trimethylbenzene, and naphthalene) and DRO were found at concentrations in groundwater above their screening levels. Based on the field indication of impacts at SWMU 1-4, an additional soil boring (SWMU 1-24) was completed between SWMU 1-4 and SWMU 1-5. SWMU 1-24 was drilled to a depth of 34 feet, but bedrock was not encountered. A saturated interval of clayey silt/sand was identified from 24 to 28 feet bgl. A groundwater sample collected from this boring found benzene, 1-methylnaphthalene, DRO, and naphthalene at concentrations above their screening levels.

Based on the field evidence of potential impacts at borings SWMU 1-4 and SWMU 1-24, two additional soil borings (SWMU 1-20 and SWMU 1-38) were drilled west of the Aeration Basin. At location SWMU 1-20 (located southwest of SWMU 1-4), bedrock was encountered at a depth of only 10 feet bgl and there was no indication of saturation in the boring or the clayey sand deposits, which were identified in SWMU 1-4. No groundwater sample was collected at SWMU 1-20 as the boring was dry. Soil boring SWMU 1-38 was drilled west-northwest of SWMU 1-4 and bedrock was encountered at a depth of only 6 feet bgl. Once again, the clayey sand deposits, which were saturated in boring SWMU 1-4, were not present at this location to the west of the Aeration Basin. No groundwater sample was collected at SWMU 1-38 because the boring was dry. Based on the results of borings SWMU 1-20 and SWMU 1-38, it does not appear that the saturated zones found in SWMU 1-4 and SWMU 1-24 extend beyond the base of the slope on the west side of the Aeration Basin where borings SWMU 1-20 and SWMU 1-38 were completed.

Soil boring SWMU 1-5 was drilled on the northwest corner of the Aeration Basin where bedrock was encountered at a depth of 27 feet bgl. A thin layer of saturated clayey sand (26 - 27’ bgl) was identified on top of the bedrock. The temporary well completion produced very little water and no organic constituents were detected above their screening levels.

Soil boring SWMU 1-6 was drilled along the northern edge of the Aeration Basin and bedrock was found at a depth of 11 feet bgl. Two saturated clayey sand zones were identified at 4 - 6 feet and 10 - 11 feet bgl. DRO was the only organic analysis to exceed the screening level.

On the east side of the Aeration Basin, approximately 150 feet south of the northern most extent of the Aeration Basin, soil boring SWMU 1-7 was drilled to a depth of 18 feet bgl. Bedrock was encountered at 16 feet bgl. The only indication of saturation was in thin sand seams in the clay that immediately overlies the bedrock. No organic constituents were found to exceed their screening levels in the groundwater sample collected at SWMU 1-7.

Soil boring SWMU 1-8 was completed on the east side of the Aeration Basin near the New API Separator. Bedrock was encountered at depth of 19 feet bgl and there was one relatively thick saturated interval of clayey sand found on top of the bedrock from a depth of approximately 13 feet to 19 feet bgl. 1-Methlynaphthalene, MTBE and naphthalene were found in the groundwater sample collected from this boring at concentrations above their screening levels; however, there are additional monitoring wells in this area (e.g., NAPIS-1 located east of the new API Separator) that can be used to provide delineation to the east.

While there are detections of seven organic constituents and DRO in groundwater samples collected immediately surrounding the Aeration Basin, the concentrations are not significantly above the screening levels (i.e., generally less than one order of magnitude above the screening level). The saturated intervals in most locations consist of clayey sand, which was found to not be very productive during sample collection activities. The clayey sand intervals do not appear to be laterally continuous at most locations based on the inability to correlate zones between most of the soil borings completed around the perimeter of the Aeration Basin. It also appears that the source of recharge to the saturated intervals found in the borings around the Aeration Basin is the wastewater, which has been maintained in the Aeration Basin. As the Aeration Basin is removed from service and the liquids are removed, it is probable that the saturation observed in borings SWMU 1-2, SWMU 1-3, SWMU 1-4, SWMU 1-5, SWMU 1-6, SWMU 1-7, SWMU 1-8, SWMU 1-24, and SWMU 1-37 will dissipate.

7.1.2 Old API Separator

Soils

Twelve organic constituents [1,1,2-Trichloroethane, 1,2,4-trimethylbenzene, 1,2-dibromo-3-chloropropane, 1,2-dibromoethane (EDB), 1,2-dichloropropane, 1-methylnaphthalene, 2-methylnaphthalene, benzene, ethylbenzene, naphthalene, xylenes, and bis(2-chloroethyl)ether] and DRO were detected in soils at concentrations above their DAF screening levels. Two constituents (1,2-dibromo-3-chloropropane and 1,2-dibromomethane) had concentrations above

the residential soil screening levels, but below the non-residential screening levels. The highest concentrations were found in soil samples collected directly beneath the former location of the OAPIS at borings SWMU 14-12, SWMU 14-13, and SWMU 14-14, and at borings immediately adjacent to the OAPIS (e.g., SWMU 14-15, SWMU 14-16, and SWMU 14 -17). In addition, there is an area of elevated concentrations at depths of 8 to 12 feet bgl located near the west end of the former OAPIS, near borings SWMU 14-6 and SWMU 14-7, and extending north towards the location of the former benzene strippers.

Concentrations of these organic constituents decrease away from the OAPIS and the lateral extent of the impacts to soil were delineated to the south in soil borings SWMU 14-21 and SWMU 14-22. All constituents except benzene were found below their respective DAF screening levels to the east of the OAPIS in boring SWMU 1-23. Benzene was detected at 1.1 mg/kg vs. a DAF screening level of 0.796 mg/kg in silty clay at a depth of 12 – 14 feet in SWMU 14-23. All constituents were found at concentrations below their screening levels in the western most soil boring (SWMU 14-1), which was drilled to a depth of 50 feet in an attempt to hit bedrock or saturation. The extent of impacts to soil was not defined to the north toward the Aeration Basin, as demonstrated by impacts found in soil boring SWMU 14-3, which is located approximately half way between the former OAPIS and the Aeration Basin. It is possible that the impacts to soil may extend continuously between the OAPIS and the Aeration Basin, which are separated by only a short distance of approximately 60 feet. The vertical impacts to soil were found to extend to the uppermost groundwater-bearing horizons in borings SWMU 14-2 and SWMU 14-3.

Groundwater

Groundwater samples were collected from temporary well completions in two soil borings (SWMU 14-2 and SWMU 14-3) and one permanent monitoring well (OAPIS-1), which was installed in boring SWMU 14-2. Similarly as observed above for the temporary well completions around the Aeration Basin, many metals were detected above residential / tap water screening levels in the groundwater samples collected at the temporary well. The number of metals detected at concentrations above their screening levels in the groundwater sample collected from the permanent well completion (OAPIS-1) was significantly less than the number detected in the groundwater sample collected from the initial temporary well completion in this same soil boring (SWMU 14-2). It is possible that these results are affected by high turbidity levels in the water samples collected from the temporary well completions.

Seven organic constituents (benzene, 1-methlynaphthalene, 2-methylnaphthalene, 1,2,4-trimethlybenzene, Methylene chloride, MTBE, and naphthalene) and DRO were detected at concentrations above their screening levels in groundwater samples collected from both locations [SMWU 14-2 (OAPIS-1) and SMWU 14-3). Soil boring SWMU 14-2 was drilled to a depth of 26 feet, but did not encounter bedrock, nor was there any distinct saturated interval logged in this boring. Soil boring SWMU 14-3 was also drilled to a depth of 26 feet and did not encounter bedrock. An indication of potential saturation was observed near the top of a clay horizon in SWMU 14-3 at 14 feet bgl. Groundwater production was very slow from both of these locations, indicating the lack of a true aquifer.

The lateral extent of potential impacts to groundwater was defined by a series of dry soil borings drilled to the west, south and east of the OAPIS. SWMU 14-1, the western most soil boring near the OAPIS was drilled to a depth of 50 feet and never did encounter bedrock. There was no indication of saturation in SWMU 14-1 and the boring failed to produce any water. Two borings (SWMU 14-21 and SWMU 14-22) were drilled south of the OAPIS and no elevated PID readings or indication of saturation was logged in either boring. Soil boring SWMU 14-23 was drilled east of the OAPIS and did encounter a sandy clay zone at 16 feet bgl that was wet, but a temporary well completion in the boring failed to produce any water.

7.2 Recommendations

An additional soil boring to the north of the Aeration Basin near soil boring SWMU 1-6 could be completed to provide full delineation of both soil and groundwater impacts to the north of the Aeration Basin. Also an additional boring to the southwest of location SWMU 1-37 could provide additional control in this area for potential groundwater impacts. The area between the OAPIS and the Aeration Basin is relatively small and does not warrant additional investigation to determine if there is possible separation of impacts sourced from the two different SWMUs.

An additional soil boring could be installed east of the OAPIS near SWMU 1-23 to provide full delineation of soil impacts observed in this area. Additional soil data to the southwest of SWMU 14-6 could be used to better define soil impacts observed in this area of the site.

Section 8
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Tables

Figures

Appendix A

Trihydro Report, June 2008

Appendix B

Field Methods

Field Methods

Pursuant to the Investigation Work Plans for SWMU No.1 and No. 14, an investigation of soils and groundwater was conducted to determine and evaluate the presence, nature, extent, fate, and transport of contaminants. To accomplish this objective, soil borings and monitoring wells were installed at the Aeration Basin and Old API Separator. The field methods are described below and individual discussions are presented for the following activities:

- Drilling procedures;
- Soil screening;
- Decontamination procedures;
- Monitoring well development;
- Fluid level measurements;
- Purging of monitoring wells/groundwater sample collection;
- Sample collection and handling procedures;
- Vadose zone vapor sampling;
- Equipment calibration; and
- Management of investigation derived waste.

Drilling Procedures

The soil borings were drilled using the hollow-stem auger (HSA) method or a hand auger was used for shallow (two-foot) borings. Soil samples were collected continuously and logged by a qualified geologist in accordance with the Unified Soil Classification System (USCS) nomenclature. As shown on the boring logs, the data recorded included the lithologic interval, symbol, percent recovery, field screening results, and a sample description of the cuttings and core samples.

Soil Screening

Samples obtained from the borings were screened in the field on 2-foot intervals for evidence of contaminants. Field screening results were recorded on the soil boring logs. Field screening results were used to aid in the selection of soil samples for laboratory analysis. The primary screening methods include: (1) visual examination, (2) olfactory examination, and (3) headspace vapor screening for volatile organic compounds.

Visual screening included examining the soil samples for evidence of staining caused by petroleum-related compounds or other substances that may have caused staining of soils such as elemental sulfur or cyanide compounds. Headspace vapor screening was conducted and involved placing a soil sample in a plastic sealable bag allowing space for ambient air. The bag was sealed, labeled and then shaken gently to expose the soil to the air trapped in the

container. The sealed bag was allowed to rest for a minimum of 5 minutes while the vapors equilibrated. Vapors present within the sample bag's headspace were then measured by inserting the probe of a MiniRae 2000 portable volatile organic constituent (VOC) monitor in a small opening in the bag. The maximum value and the ambient air temperature were recorded on the field boring log for each sample. The screening results are presented in Table 3. Field screening results and any conditions that were considered to be capable of influencing the results of the field screening were recorded on the field logs.

Decontamination Procedures

The drilling equipment (e.g., hollow-stem augers) was decontaminated between each borehole using a high pressure potable water wash. The sampling equipment coming in direct contact with the samples (e.g., hand augers and split-spoon samplers) were decontaminated using a brush, as necessary, to remove larger particulate matter followed by a rinse with potable water, wash with nonphosphate detergent, rinse with potable water, and double rinse with deionized water. In the event that more than one SWMU was investigated during the day a new batch of wash water and rinse water was prepared prior to decontamination.

Monitoring Well Development

Following monitoring well completion activities, the new monitoring well (OAPIS-1) was developed using a bailer. Using a bailer attached to the end of the clean rope, groundwater was forced to flow in and out of the well screen by the repeated upward and downward motion of the bailer along the entire length of the well screen. The repeated plunging motion drew filter pack fines and loosened sediment into the well casing, improving the water quality within the surrounding formation and filter pack.

Once the well was surged for a minimum of 10 minutes, the groundwater/sediment was removed and discharged directly into a 55-gallon drum. A glass jar was used to capture a sample of the purge water to monitor the improving clarity of the purge water. Bailing ceased once the purge water was relatively clear.

Due to the very slow recovery rates and small volume of water accumulating in temporary well completions, these wells were not developed following the normal procedures for permanent monitoring wells.

Fluid Level Measurements

The depth to separate phase hydrocarbon, if present, and groundwater was measured prior to purging the wells of potentially stagnant groundwater. The measurements are presented in Table 12. A Geotech Interface Probe was used to measure fluid levels to 0.01 foot.

Purging of Monitoring Wells/Groundwater Sample Collection

The permanent monitoring well (OAPIS-1) was purged of a minimum of three well volumes prior to sample collection. The purge volumes are calculated as follows:

Volume (gallons) = water column thickness (ft) x 3.14 x radius of well casing^2 (ft) x 7.48 (gals/ft). The calculated purge volumes and actual volumes removed from each well are presented below.

Well (date)	Water Column Thickness (ft)	Calculated Purge Volume (gallons) – 3 Well Volumes	Actual Purge Volume (gallons)
OAPIS-1 (10/15/2012)	17.95	9.15	9.25

Field measurements of groundwater stabilization parameters included pH, specific conductance, dissolved oxygen concentrations, oxidation-reduction potential, and temperature. These measurements are presented in Table 11. A disposable bailer was used to remove groundwater from the well during the purging procedures. Due to the very slow recovery rates and small volume of water accumulating in the temporary well completions, the temporary wells were not purged prior to sample collection with a disposable bailer.

Sample Collection and Handling Procedures

Soil samples were collected using split-spoon samplers or directly from the auger bucket for borings completed with a hand auger. The selected portion of the sample interval was placed in pre-cleaned, laboratory-prepared sample containers for laboratory chemical analysis. Three soil samples were collected for VOC analysis. An Encore® Sampler was used for collection of soil samples for low-level VOC analysis pursuant to EPA method 5035; the second sample aliquot (approximately 1 gram) was placed in a laboratory-prepared container with a methanol preservative; and the third sample aliquot was placed in an 8-ounce glass jar, which was filled to the top to minimize any head space.

Groundwater samples were collected with disposable bailers and immediately poured directly into clean laboratory supplied sample containers with the exception of samples collected for dissolved

analyses. Samples specified for dissolved analyses were filtered in the field using a disposable 0.45 micron filter. A new filter and syringe enclosure were used for each sample. All samples were immediately placed into an ice chest with ice. The samples were maintained in the custody of the sampler until the chain-of-custody form was completed and the ice chest was sealed for shipment to the laboratory.

Equipment Calibration

Soil vapor screening was conducted using a MiniRae 2000 portable VOC monitor. The instrument was calibrated at the beginning of each work day to a concentration of 100 ppm isobutylene.

The instruments used to measured groundwater stabilization parameters included a YSI 650 MDS Data Logger and YSI 600 XLM-M Sonde. The calibration solutions used at the beginning of each day are as follows:

- 4.0 pH solution;
- 7.0 pH solution; and
- 1.413 mS/cm conductivity solution.

Management of Investigation Derived Waste

The decontamination water from the drilling equipment was collected on a mobile decon trailer and was subsequently placed in open top 55-gallon drums, which were sealed at the end of each work day. The decontamination water generated from sampling equipment was collected in buckets and placed in open top 55-gallon drums, which were sealed at the end of each work day. Purge water was also collected in a 55-gallon drum. The decon and purge water was disposed in the Refinery's wastewater treatment system up-stream of the API Separator. Soil cuttings were also placed into open top 55-gallon drums and were sealed when not in use. Each drum of soils was labeled and temporarily stored in a concrete curbed area pending waste characterization and disposal.

Appendix C

Site-Specific Dilution/Attenuation Factor Calculations

Appendix D

Boring Logs

Appendix E

Analytical Data Reports

Appendix F

Quality Assurance/Quality Control Review