## AP - 111

## SWMUs No. 1 (Aeration Basin) & No. 14 (Old API Separator)

# Investigation Report (5)

August 2015

## Appendix A

Trihydro Report, June 2008

### AERATION LAGOONS 1 AND 2 AND EVAPORATION POND 1 - SEDIMENT INVESTIGATION WESTERN REFINING COMPANY GALLUP REFINERY GALLUP, NEW MEXICO

June 2, 2008

Project #: 697-019-001

**PREPARED BY:** Trihydro Corporation

1252 Commerce Drive, Laramie, WY 82070



ENGINEERING SOLUTIONS. ADVANCING BUSINESS. Home Office | 1252 Commerce Drive | Laramie, WY 82070 | phone 307/745.7474 | fax 307/745.7729 | www.trihydro.com

## **Executive Summary**

In January of 2008, the Western Refining Company's Gallup Refinery (Gallup) requested the assistance of Trihydro Corporation (Trihydro) to characterize the accumulated sediment in Aeration Lagoons 1 and 2 and Evaporation Pond 1. Gallup also requested that Trihydro collect sediment thickness measurement at various locations and calculate the approximate volume of sediment in the above mentioned aeration lagoons and pond.

A Sediment Sampling Work Plan (Plan) was prepared to assist in the field activities and was submitted to Western Refining Company and the New Mexico Department of Environmental Quality (NMED) on March 28, 2008. After reviewing the Plan, NMED recommended collecting discrete-depth grab samples instead of composite samples as proposed in the Plan. Gallup Refinery agreed with this recommendation and discrete-depth grab samples were collected from various sediment depths in each body of water.

Field work to implement the plan was conducted from April 7 to April 11, 2008. Field work consisted of:

- Collecting two sediment samples at five locations in each aeration lagoon.
- Measuring sediment thicknesses at each aeration lagoon sample location as well as five additional locations in each lagoon to assist in sediment volume calculations.
- Collecting one sediment sample at eight locations in Evaporation Pond 1.
- Measuring sediment thicknesses at each evaporation pond sample location as well as eight additional locations to assist in sediment volume calculations.

The sediment samples were analyzed for diesel range organics (DRO)/gasoline range organics (GRO) by USEPA method 8015, semi-volatile organic compounds (SVOCs) by USEPA method 8270, volatile organic compounds (VOCs) by USEPA method 8260, RCRA metals by USEPA method 6010C, and mercury by USEPA Method 7471. Results of the laboratory analysis are discussed in Section 6.



## **Table of Contents**

1.0	INTR	RODUCT	ION		1-1					
2.0	REC	ONNAIS	SANCE F	IELD EVENT	2-1					
3.0	DEV	IATIONS	S FROM A	PPROVED PLAN	3-1					
4.0	FIEL	D INVES	STIGATIO	)N	4-1					
	4.1	Site Co	onditions		4-1					
	4.2	Sediment Investigation Methodology								
		4.2.1	Sample a	and Sediment Measurement Locations	4-1					
		4.2.2	Sedimen	t Measurements	4-1					
		4.2.3	Sedimen	t Sampling	4-2					
			4.2.3.1	Sampling Methods and Procedures – Aeration Lagoons	4-2					
			4.2.3.2	Sampling Methods and Procedures – Evaporation Pond 1	4-3					
		4.2.4	Equipme	nt Decontamination Procedures	4-4					
		4.2.5	Field Do	cumentation and Logging	4-4					
	4.3	Sedime	ent Charact	teristics	4-4					
		4.3.1	Sedimen	t Characteristics – Aeration Lagoons 1 and 2	4-4					
		4.3.2	Sedimen	t Characteristics – Evaporation Pond 1	4-5					
	4.4	Investigation Derived Waste								
5.0	REG	ULATOF	RY CRITE	CRIA	5-1					
6.0	ANA	LYTICA	L RESUL	TS	6-1					
	6.1	Total F	Petroleum I	Hydrocarbons (TPH)	6-1					
	6.2	Metals			6-1					
	6.3	Semi-Volatile Organic Compounds								
	6.4	Volatile Organic Compounds								
	6.5	Quality	y Assuranc	e/Quality Control Protocol	6-2					
7.0	CON	CLUSIO	NS		7-1					
	7.1	Sedime	ent Volume	es	7-1					
	7.2	Sedime	ent Charact	terization	7-1					



## **List of Tables**

- 1. Sediment Depth and Thickness Measurements, Gallup Refinery, Western Refining Company, Gallup, New Mexico
- 2. Analytical Data Summary, Gallup Refinery, Western Refining Company, Gallup, New Mexico



## **List of Figures**

 Sediment Measurement and Sample Locations for Aeration Lagoons 1 and 2 and Evaporation Pond 1, Western Refining Company L.L.C., Gallup Refinery, Gallup, New Mexico



## **List of Appendices**

- A. INVESTIGATION PHOTOS
- B. SEDIMENT SAMPLE FORMS
- C. LABORATORY RESULTS
- D. DATA VALIDATION REPORTS
- E. SURVCAD VOLUME CALCULATIONS



## **1.0 INTRODUCTION**

Aeration Lagoon 1, Aeration Lagoon 2, and Evaporation Pond 1 are currently used as part of Gallup's process water treatment system. Both lagoons and the evaporation pond are located in an area west/northwest from the refinery that is approximately 280 feet by 440 feet in size. Gallup is considering taking the two lagoons and Evaporation Pond 1 out of service and removing accumulated sediment. In order to determine the approximate volume of sediment that needs to be removed from each lagoon and pond, Gallup requested that Trihydro conduct a sediment investigation in each of the above mentioned bodies of water. The investigation included sampling the sediment and collecting sediment depth measurements which will assist Gallup in determining appropriate volumes and disposal methods for the sediment.

A reconnaissance event was conducted during the week of March 2, 2008. The purpose of this event was to help determine the appropriate sediment sampling and measurement methodoligies. Results of this event are discussed in Section 2. The Sediment Sampling Work Plan (Plan), prepared to assist in the investigation, was submitted to Western Refining Company on March 28, 2008. Field activities associated with the investigation were performed in accordance with the Plan unless otherwise noted in Section 3. Field investigation methodologies and results are described in detail in Section 4. Trihydro has compared the results of the analytical data with relevant screening levels that may help determine appropriate disposal of sediments. The screening levels and the results of the analytical data are described in detail in Sections 5 and 6, respectively. The approximate sediment volume calculations and investigation conclusions are discussed in Section 7.



## 2.0 RECONNAISSANCE FIELD EVENT

To determine the appropriate sampling techniques and sediment thickness measurement procedures, Trihydro completed a reconnaissance field event during the week of March 2, 2008. During this event, approximate water depths and sediment thicknesses were measured at six locations within Aeration Lagoon 2 and eight locations in Evaporation Pond 1.

Based on the results of the reconnaissance field event, the sediment in Aeration Lagoon 2 appeared to be stratified into two general sediment types. The uppermost sediment layer was determined to be soft, loose, and unconsolidated. This "soft sediment" ranged in thickness from approximately 8-10 feet. Similar thicknesses were encountered during the April 2008 sampling activities. During the reconnaissance event, the material underlying the soft sediment was determined to be a more compact, dense layer of sediment. This "hardpack sediment" occurs directly beneath the soft sediment and extends to the bottom of aeration lagoons. The reconnaissance field event provided information to determine the most appropriate sampling methods.

Hardpack sediment was not identified during the reconnaissance field effort in Evaporation Pond 1. Soft sediment was identified in Evaporation Pond 1 and ranged in thicknesses from approximately 2 to 4 feet. A hard layer, presumably the native soil bottom of the pond, was identified beneath the soft sediment during both field events.



## 3.0 DEVIATIONS FROM APPROVED PLAN

According to the Plan, at each sample location in the aeration lagoons, the soft sediment interval was to be composited and sampled and the hardpack sediment interval was to be composited and sampled. However, based on a teleconference between NMED and Gallup Refinery on April 8, 2008, the sampling methodology was modified so that one discrete-depth grab sample would be collected from each interval (soft sediment and hardpack) at each sample location at varying depths throughout the lagoons instead of compositing the entire intervals at each sample location.

Based on the March 2008 reconnaissance field event, it was presumed that only one distinct interval of sediment would be present in Evaporation Pond 1. As such, only one sediment sample was collected from each location during the April sampling event. According to the Plan, the entire sediment interval at each sampling location in Evaporation Pond 1 was to be composited and sampled. However, based on the above mentioned teleconference, one discrete-depth grab sample was collected from each sample location at varying sediment depths throughout the pond.



## 4.0 FIELD INVESTIGATION

Sediment measurements and samples were collected on April 7 through 11, 2008 by Trihydro personnel. The sample and measurement locations, methods, equipment, decontamination procedures, documentation and logging, and investigation derived waste (IDW) disposal are described in this section.

#### 4.1 SITE CONDITIONS

Both lagoons and the pond are located in an area approximately 280 feet by 440 feet. Processed refinery waste water effluent from the New API Separator is discharged in to Aeration Lagoon 1 where it is furthered treated with the assistance of two large aerators. The aerators promote increased biodegradation. Water from Aeration Lagoon 1 is then routed to Aeration Lagoon 2 where it undergoes a similar process. The effluent from Aeration Lagoon 2 is drained into Evaporation Pond 1. The two aerators in Aeration Lagoon 1 were operational immediately prior to sampling activities and were shut down to allow for pond access. No aerators were operating in Aeration Lagoon 2 or Evaporation Pond 1 immediately prior to or during sampling activities. High winds with gusts up to 50 mph were common during April event.

#### 4.2 SEDIMENT INVESTIGATION METHODOLOGY

#### 4.2.1 SAMPLE AND SEDIMENT MEASUREMENT LOCATIONS

In order to more accurately locate appropriate and representative sediment sample and measurement locations, a grid with approximately 40 foot spacing was marked off for each lagoon and pond. Five representative sediment sample locations and five representative sediment measurement locations were selected for each lagoon. As shown on Figure 1, eight sample and eight measurement locations were selected for Evaporation Pond 1. The locations of the lagoon and pond influents, effluents, and aerators were considered when determining representative sample locations. The grids illustrated on Figure 1 were staked by Trihydro field personnel using the corners of the lagoons and pond as reference points. The density of sample locations and measuring points allowed Trihydro field personnel to sufficiently characterize the lagoons and pond.

#### 4.2.2 SEDIMENT MEASUREMENTS

Sediment measurements in the aeration lagoons were obtained with two measuring devices: a graduated 2-inch capped PVC pipe and a graduated <sup>3</sup>/<sub>4</sub>-inch steel pole. Sediment measurements were collected at the sample locations and at the



additional measuring point locations using these two devices. The top of the soft sediment was measured by gradually inserting the PVC pipe until a slight amount of resistance was felt. The PVC was then pressed down with force until refusal was encountered. The depth that refusal with the PVC pipe was encountered is the estimated depth to the top of the hardpack sediment. For consistency, the same person took all measurements using the PVC pipe. The graduated <sup>3</sup>/<sub>4</sub>-inch steel pole was then driven to the bottom of the lagoon until refusal encountered. Due to the narrower diameter, the lack of buoyancy, and the added weight of the steel pole, it was able to be driven deeper into the sediment than the 2-inch PVC pipe. The depth at which the steel pole encountered refusal is estimated to be the bottom of the lagoon. For consistency, the same person took all measurements using the steel pole. Table 1 shows the sediment depths and thicknesses of all sampling and measuring points.

Sediment measurements were collected in a slightly different manner in Evaporation Pond 1. Evaporation Pond 1 had deeper water than the aeration lagoons. The deeper water made collecting sediment measurements with the PVC pipe difficult. Therefore, the <sup>3</sup>/<sub>4</sub>-inch graduated steel pole was used to record sediment measurements in Evaporation Pond 1 which contains only one distinct sediment interval. The steel pole was gradually inserted into the water until a slight amount of resistance was encountered. This depth is the estimated depth of the top of the soft sediment. The steel pole was then driven into the sediment until refusal was encountered. The depth at which the steel pole encountered refusal was taken to be the depth of the bottom of the pond. For consistency, the same person took all measurements using the steel pole in Evaporation Pond 1.

#### 4.2.3 SEDIMENT SAMPLING

Several procedures were utilized to sample the sediment depending on the anticipated sediment sample depths and consistencies. The procedures and methods are discussed below.

#### 4.2.3.1 SAMPLING METHODS AND PROCEDURES – AERATION LAGOONS

Based on the March 2008 reconnaissance field event, it was presumed that there would be two distinct layers of sediment in each of the two lagoons: a soft sediment layer and a hardpack layer. As such, two sediment samples were collected at each location. Two different sampling techniques were used to obtain representative sediment samples from the different layers: a butterfly valve-operated sediment sampler (Sediment Sampler) and a stainless steel hand auger (Auger).



Soft sediment samples were collected using the Sediment Sampler. The Sediment Sampler was pushed into the soft sediment from a boat at each sampling location. A clean, disposable, eight foot sediment core tube was used at each sample location. The core tube was driven to a sediment depth of eight feet, total depth, or until refusal was reached using a rubber mallet. Upon retrieval, the butterfly valve closes creating a suction that prevents the sediment from falling out of the bottom of the core tube. The core tube was then immediately capped until the samples could be extracted. Samples were extracted by removing the bottom and top caps off of the core tube allowing the sediment to gradually slide out onto a clean piece of plastic sheeting. Varying depths were selected at each sampling location to collect representative samples. A discrete-depth grab sample was then collected from the selected depth and placed on ice.

The Auger was used to collect discrete-depth hardpack sediment samples from sample locations in the aeration lagoons. Field personnel attempted to collect hardpack samples from as close to the original soft sediment sampling location as possible. The depths of the discrete-depth grab samples were determined in the field based on the results of the sediment measurements described in Section 4.2.2. It should be noted that much difficulty was encountered when attempting to drive the Auger to the desired sample depths. At one location, the Auger became stuck in the sediment to the extent that manual retrieval was not a safe option. Subsequently, field personnel determined that it was not safe to attempt to drive the auger to all of the desired sampled depths. As such, the Auger was driven into the sediment until the desired sample depth was achieved or until refusal. Soft sediment overlying the desired hard pack sample interval was pushed through the open top of the Auger as the Auger was driven down. After the desired depth or refusal was achieved, the hardpack sediment was extracted from the Auger, sampled, and placed on ice.

It should be noted that the soft sediment and hardpack sediment descriptions and corresponding depths on the sediment sample forms in Appendix B were obtained from the sediment collected with the Sediment Sampler and the Auger. The measurements that were used to approximate sediment volumes were obtained with the graduated, capped 2-inch PVC pipe and the graduated, <sup>3</sup>/<sub>4</sub>-inch steel pole as described in Section 4.2.2. Due to the different techniques and equipment used for sampling and measurement collecting, slight discrepancies exist between the measurements collected with the two different devices.

#### 4.2.3.2 SAMPLING METHODS AND PROCEDURES – EVAPORATION POND 1

As mentioned in Section 2.0, no hardpack sediment was encountered in Evaporation Pond 1. Soft pack sediment sampling was performed in the same manner described for Aeration Lagoons 1 and 2. Sediment thicknesses were



much less in Evaporation Pond 1 than they were in the aeration lagoons. At sampling locations, sediment thicknesses ranged from 1.2 to 2.2 feet.

#### 4.2.4 EQUIPMENT DECONTAMINATION PROCEDURES

Sampling equipment was decontaminated before sampling commenced and after each sample was collected. All sampling devices were decontaminated using a non-phosphate detergent solution followed by two distilled water rinses. Prior to use, the equipment was either air-dried or dried with clean paper towels. The PVC pipe and steel pole used to for collecting sediment measurements were not decontaminated in between measuring points because these devices did not come in contact with the samples.

#### 4.2.5 FIELD DOCUMENTATION AND LOGGING

A qualified geologist was on-site to log all sediment samples. The sample logs were completed according to the Plan specifications. Sample logs are included as Appendices B. No field screening (Photo-ionization Detector) was performed because all sediment samples were collected from beneath the water of the lagoons and pond and were saturated upon retrieval.

Photographs were used to document field activities. These photographs may be used to substantiate and augment the field notes. Photographs were also taken of sediment samples that were characteristic of samples collected from the lagoons and pond. Additionally, photographs were taken to document unique features of sample media, sediment staining, or other defining features. Since the majority of the samples collected were very similar in appearance, Trihydro did not deem it necessary to take photographs of every sediment sample. Each photograph was numbered and recorded on the photograph log. The investigation photographs are included as Appendix A.

#### 4.3 SEDIMENT CHARACTERISTICS

The sediments encountered in the aeration lagoons and Evaporation Pond 1 differed slightly. Each is described in detail below.

#### 4.3.1 SEDIMENT CHARACTERISTICS – AERATION LAGOONS 1 AND 2

Sediment characteristics were recorded on the sediment sample forms included as Appendix B. The sediment layers encountered during sampling were not as distinct as was anticipated based on the March 2008 reconnaissance field event. A visual distinction between the two layers was not clearly evident during the April 2008 field event, however,



as described in Section 4.2.2., an attempt was made to measure the soft sediment and hardpack sediment layers in the aeration lagoons. Based on these measurements, soft sediment thickness ranged from 3.5 feet to 5.9 feet in Aeration Lagoon 1 and 5.8 feet to 8.5 feet in Aeration Lagoon 2. The sediment characteristics were similar in both ponds. The sediment is described on the sample forms as a black sludge (organic) that is generally fluid in the upper portion and thickens with depth. At some locations, varying degrees of silt content, green staining, and fibrous root content are noted. An organic odor is described throughout all sampling locations. Based on the measurements described in Section 4.2.2, the hardpack sediment ranges in thickness from 0 feet to 2.5 feet in Aeration Lagoon 1 and 0 feet to 2.2 feet in Aeration Lagoon 2. The hardpack sediment in Aeration Lagoons 1 and 2 appear to have very similar physical characteristics based on the samples collected with the Auger. The upper portion of the hardpack sediment appears to be the same as the lower portion of the soft sediment, but is slightly thicker and generally contains a greater amount of silt. The lower portion of the hardpack sediment is generally described as grey or reddish-grey clay with varying amounts of sand and silt. It is presumed that this clay is actually the base of the lagoons.

#### 4.3.2 SEDIMENT CHARACTERISTICS – EVAPORATION POND 1

The sediment encountered in Evaporation Pond 1 appears to have very similar physical characteristics to the soft sediment encountered in the aeration lagoons. Based on the measurements described in Section 4.2.2., sediment thicknesses ranged from 1.2 feet to 5.1 feet. However, it should be noted that of the 16 locations that sediment was measured, only 5 of them had sediment thicknesses greater than 2 feet. As anticipated based on the March reconnaissance field event, only one distinct sediment layer was encountered. The sediment in Evaporation Pond 1 can generally be described as a black sludge that is fluid in the upper portions, has a silt content and thickness that increase with depth, and contains an organic odor throughout. Silt, and at some locations sand, are generally only noted in the lowest few inches of each location. Some green staining was also noted in several of the samples.

#### 4.4 INVESTIGATION DERIVED WASTE

Excess sediment collected from the aeration lagoons and Evaporation Pond 1 was returned to the lagoons and pond from which it was collected. Wastes associated with sampling including personal protective equipment (PPE), rinse water from decontamination, and disposable sampling instruments were managed according to appropriate regulations by Gallup.



## 5.0 REGULATORY CRITERIA

This investigation was internally driven in order to characterize and approximate the volume of sediment in each of the lagoons and pond. As such, no regulatory screening levels have been designated as the clean up criteria of the sediment. However, since the data obtained in this investigation may be utilized to determine appropriate disposal options for the sediment upon pond/lagoon closure, Trihydro included a comparison of the analytical results to the EPA's Maximum Concentration of Contaminants for the Toxicity Characteristic and NMED's Industrial Soil Screening Levels. These comparisons are illustrated on Table 2 and described in detail in Section 7.2.



## 6.0 ANALYTICAL RESULTS

Laboratory sampling analyses included diesel range organics (DRO)/gasoline range organics (GRO) by USEPA method 8015, semi-volatile organic compounds (SVOCs) by USEPA method 8270, volatile organic compounds (VOCs) by USEPA method 8260, RCRA metals by USEPA method 6010C, and mercury by USEPA Method 7471. The laboratory results are included as Appendix C. The sample data is summarized in Table 2.

#### 6.1 TOTAL PETROLEUM HYDROCARBONS (TPH)

DRO was detected in each of the sediment samples at concentrations ranging from 7,200 mg/kg to 370,000 mg/kg. MRO was detected in 11 of the 28 samples analyzed at concentrations ranging from 25,000 mg/kg to 37,000 mg/kg and was detected in each body of water including both the soft sediment and the hardpack sediment samples in the aeration lagoons. GRO was detected in each Aeration Lagoon 1 sample (soft sediment and hardpack) and one Aeration Lagoon 2 sample (soft sediment) at concentrations ranging from 150 mg/kg to 670 mg/kg. GRO was not detected in any of the Evaporation Pond 1 samples. The average total TPH concentration (DRO + MRO + GRO) for Aeration Lagoon 1, Aeration Lagoon 2, and Evaporation Pond 1 was 133,870 mg/kg, 193,343 mg/kg, and 164, 750 mg/kg, respectively. The average TPH concentrations were higher in the soft sediment samples than the hardpack sediment samples in both aeration lagoons. When comparing the average TPH concentrations of the soft sediment samples to the hardpack samples, the Aeration Lagoon 1 showed a 22 percent decrease and Aeration Lagoon 2 showed a 54 percent decrease.

#### 6.2 METALS

The suite of metals for which the samples were analyzed consisted of arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Of these, arsenic, barium, cadmium, chromium, lead, and mercury were detected in each sample. Selenium and silver were not detected in any samples analyzed. Arsenic concentrations ranged from 3.2 mg/kg to 47 mg/kg, barium concentrations ranged from 81 mg/kg to 500 mg/kg, cadmium concentrations ranged from 0.12 mg/kg to 6.6 mg/kg, chromium concentrations ranged from 8.3 mg/kg to 60 mg/kg, lead concentrations ranged from 9.7 mg/kg to 220 mg/kg, and mercury concentrations ranged from 2.1 mg/kg to 18 mg/kg. The average total-metal concentrations (arsenic + barium + cadmium + chromium + lead + mercury) decreased in the direction of water flow: Aeration Lagoon 1 showed an average metal concentration of 398 mg/kg, Aeration Lagoon 2 showed an average metal concentration of 313 mg/kg. In Aeration Lagoon 1, the average metal concentration was 45 percent higher in the hardpack sediment than it was in the



soft sediment. In Aeration Lagoon 2, the average metal concentration was 22 percent higher in the soft sediment than it was in the hardpack sediment.

#### 6.3 SEMI-VOLATILE ORGANIC COMPOUNDS

Each sample was analyzed for a suite of 69 SVOCs using USEPA method 8270C (see Appendix C). Of these constituents, the following compounds were detected in one or more of the lagoon and pond samples: benzo(a)anthracene, chrysene, fluorene, 2-methylnaphthalene, 3+4-methylnaphthalene, naphthalene, phenanthrene, phenol, and pyrene. The average total SVOC concentration (the sum of the above mentioned analytes) for Aeration Lagoon 1, Aeration Lagoon 2, and Evaporation Pond 1 was 609 mg/kg, 418 mg/kg, and 519 mg/kg, respectively. The average SVOC concentrations of the soft sediment samples in Aeration Lagoon 1 and 2 were 32 percent and 66 percent higher than that of the hardpack sediment samples in the lagoons, respectively.

#### 6.4 VOLATILE ORGANIC COMPOUNDS

Each sample was analyzed for a suite of 65 VOCs using USEPA method 8260B (see Appendix C). Of these constituents, the following compounds were detected in one or more of the lagoon/pond samples: benzene, toluene, ethylbenzene, MTBE, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, carbon disulfide, isopropylbenzene, 4-isopropyltoluene, n-butylbenzene, n-propylbenzene, sec-butylbenzene, and xylenes. The average total VOC concentrations (the sum of the above mentioned analytes) decreased in the direction of water flow. Aeration Lagoon 1 had an average total VOC concentration of 161 mg/kg, Aeration Lagoon 2 had an average total VOC concentration of 54 mg/kg, and Evaporation Pond 1 had an average total VOC concentration in the hardpack sediment was 3 percent higher than average total VOC concentrations in the soft sediment. In Aeration Lagoon 2, the average total VOC concentration was 68 percent higher in the soft sediment than it was in the hardpack sediment.

#### 6.5 QUALITY ASSURANCE/QUALITY CONTROL PROTOCOL

Analytical data was validated through EPA Tier 1 and Tier 2 data validation standards. Analytical parameters, such as surrogate recoveries and duplicate sample analyses, were reviewed to verify the quality of data submitted. Laboratory data were also validated to verify that the samples were analyzed according to the specified USEPA Methods. Based on the Tier II data validation, qualifiers were added to the laboratory results due to high Matrix Spike (MS) and Matrix Spike Duplicate (MSD) results, high Relative Percent Difference (RPD)s, low surrogate recoveries, and severe matrix



interference. Results were flagged with a "J", indicating that the detection value is estimated, or with a "UJ", indicating that the reporting limit is estimated. No data was rejected based on the Tier II data validation. The analytical results are included as Appendix C and the data validations are included as Appendix D. Field QAQC measures included the collection of one blind duplicate per 20 samples collected, the collection of one MS and MSD sample set, and the collection of one equipment blank per day of sampling with non-disposable sampling equipment.



## 7.0 CONCLUSIONS

The purpose of this report was to describe the field activities implemented to determine approximate sediment volumes and to characterize the sediment for Aeration Lagoon 1, Aeration Lagoon 2, and Evaporation Pond 1. The conclusions of the investigation are discussed below.

#### 7.1 SEDIMENT VOLUMES

Figure 1 illustrates the approximate dimensions of Aeration Lagoon 1, Aeration Lagoon 2, Evaporation Pond 1, and the sampling and measuring point locations. These dimensions and sediment measurements were used as input parameters in SurvCAD to approximate sediment volumes for each body of water. SurvCAD volume calculations are included as Appendix E. SurvCAD estimates approximately 1464 cubic yards of soft sediment and 229 cubic yards of hardpack sediment have accumulated in Aeration Lagoon 1. SurvCAD estimates approximately 3404 cubic yards of soft sediment and 430 cubic yards of hardpack sediment have accumulated in Aeration Lagoon 1. SurvCAD estimates approximately 3404 cubic yards of soft sediment and 430 cubic yards of hardpack sediment have accumulated in Aeration Lagoon 2. As mentioned in Section 4.3.1, the distinction between the soft sediment and hardpack sediment in the aeration lagoons was not as evident as had been anticipated based on the March 2008 reconnaissance event. Because of this, for the purposes of disposal options, it may be easier to consider the entire sediment layer as one total volume for the lagoons. With this in mind, the total volume of sediments in Aeration Lagoons 1 and 2 are 1693 cubic yards and 3834 cubic yards, respectively. SurvCAD estimates that there is approximately 3178 cubic yards of sediment in Evaporation Pond 1. It should be noted that the above volume calculations are in-situ calculations and that the no expansion or compaction factors have been applied. If sediment removal is determined to be an appropriate option, appropriate factors should be applied.

#### 7.2 SEDIMENT CHARACTERIZATION

Analytical results of the sediment samples are discussed in detail in Section 6 and summarized on Table 2 As previously mentioned, the data obtained during this investigation may be utilized to determine appropriate disposal options for the sediment in the evaporation pond and aeration lagoons. As such, Trihydro included a comparison of the analytical results to the EPA's Maximum Concentration of Contaminants for the Toxicity Characteristic and NMED's Industrial Soil Screening Levels. EPA's Maximum Concentrations of Contaminants for the Toxicity Characteristic may be found in CFR Title 40 Part 261 – Identification and Listing of Hazardous Waste. These numbers are generated as screening levels for Toxicity Characteristic Leaching Procedure (TCLP) method 1311. The analysis performed on the sediment samples collected for this investigation were total constituent analysis, not TCLP. EPA does allow a total constituent analysis (as performed for Gallup's sediment samples) in lieu of the TCLP extraction. However, the results



of the total constituent analysis must be divided by twenty to be compared to the TCLP screening levels. The Maximum Concentrations of Contaminants for the Toxicity Characteristic listed of Table 2 of this report have been multiplied by 20 to adjust for the different analysis. Furthermore, the multiplier of 20 assumes that the samples were 100% solid.

As shown in Table 2, elevated concentrations of lead, mercury, arsenic, and benzo(a)anthracene were identified during this investigation. When compared to the Maximum Concentrations of Contaminants for the Toxicity Characteristic, the metals concentrations show the potential for the sediment to be characteristically hazardous. However, comparisons made should be considered estimates and the final characterization of the material should be determined during profiling.

Twenty-six samples from various depths of the three bodies of water exceeded the screening adjusted Maximum Concentrations of Contaminants for the Toxicity Characteristic screening level for mercury. Three samples exceeded this screening level for lead. It should be noted that the three samples that exceeded the lead screening level were collected from the hardpack sediment of Aeration Lagoon 1.

NMED's Industrial Soil Screening Levels may be found on Table A-1 of NMED Soil Screening Levels. Ten samples exceeded the industrial soil screening level for arsenic, and one sample exceeded the industrial soil screening level for benzo(a)anthracene. The arsenic exceedences came from the soft sediment and hardpack sediment of Aeration Lagoon 1, the soft sediment and hardpack of Aeration Lagoon 2, and sediment obtained from Evaporation Pond 1. The benzo(a)anthracene exceedence came from Evaporation Pond 1.

It is important to note that since this investigation was internally driven, no official screening standards have been set and that disposal methods should not be determined based on the above mentioned exceedences. If the sediment is to be shipped off-site for disposal, TCLP analysis will likely be required to make a hazardous/non-hazardous determination.



TABLES



#### TABLE 1. SEDIMENT DEPTH AND THICKNESS MEASUREMENTS, GALLUP REFINERY, WESTERN REFINING COMPANY, GALLUP, NEW MEXICO

Aeration Lagoon 1										
Measuring Point	Ieasuring Point Depth to Soft Sediment Soft Sediment Thickness Depth to Hardpack Hardpack Thickness Total Depth									
AL1-1	3.0	3.5	6.5	2.5	9.0	6.0				
AL1-2	1.0	3.5	None	0.0	4.5	3.5				
AL1-3	4.0	4.5	8.5	0.6	9.1	5.1				
AL1-4	1.0	5.3	6.3	1.2	7.5	6.5				
AL1-5	2.5	4.0	6.5	0.5	7.0	4.5				
AL1-A	0.5	4.2	None	0.0	4.7	4.2				
AL1-B	2.0	5.9	None	0.0	7.9	5.9				
AL1-C	5.0	3.2	8.2	0.4	8.6	3.6				
AL1-D	1.0	5.3	None	0.0	6.3	5.3				
AL1-E	0.5	4.5	None	0.0	5.0	4.5				

Aeration Lagoon 2										
Measuring Point	Depth to Soft Sediment	Soft Sediment Thickness	Depth to Hardpack	Hardpack Thickness	Total Depth	Total Sediment Thickness				
AL2-1	1.5	7.3	8.8	0.7	9.5	8.0				
AL2-2	2.0	7.5	None	0.0	9.5	7.5				
AL2-3	2.5	8.5	11.0	1.1	12.1	9.6				
AL2-4	1.5	8.0	9.5	0.8	10.3	8.8				
AL2-5	1.5	6.5	8.0	1.5	9.5	8.0				
AL2-A	1.5	8.2	9.7	0.8	10.5	9.0				
AL2-B	1.5	8.2	9.7	1.3	11.0	9.5				
AL2-C	2.0	8.0	10.0	0.5	10.5	8.5				
AL2-D	2.0	6.7	8.7	2.2	10.8	8.8				
AL2-E	4.0	5.8	9.8	0.7	10.5	6.5				

	Evaporation Pond 1											
Measuring Point	Depth to Soft Sediment	Soft Sediment Thickness	Depth to Hardpack	Hardpack Thickness	Total Depth	Total Sediment Thickness						
EP1-1	5.5	2.2	None	None	7.7	2.2						
EP1-2	9.7	1.3	None	None	11.0	1.3						
EP1-3	7.9	1.7	None	None	9.6	1.7						
EP1-4	7.8	1.5	None	None	9.3	1.5						
EP1-5	11.4	1.3	None	None	12.7	1.3						
EP1-6	4.3	1.5	None	None	5.8	1.5						
EP1-7	6.8	1.2	None	None	8.0	1.2						
EP1-8	5.3	1.7	None	None	7.0	1.7						
EP1-A	10.0	1.6	None	None	11.6	1.6						
EP1-B	6.0	2.1	None	None	8.1	2.1						
EP1-C	7.5	4.3	None	None	11.8	4.3						
EP1-D	7.3	5.1	None	None	12.4	5.1						
EP1-E	5.1	1.5	None	None	6.6	1.5						
EP1-F	6.9	1.8	None	None	8.7	1.8						
EP1-G	8.0	3.2	None	None	11.2	3.2						
EP1-H	6.0	1.6	None	None	7.6	1.6						

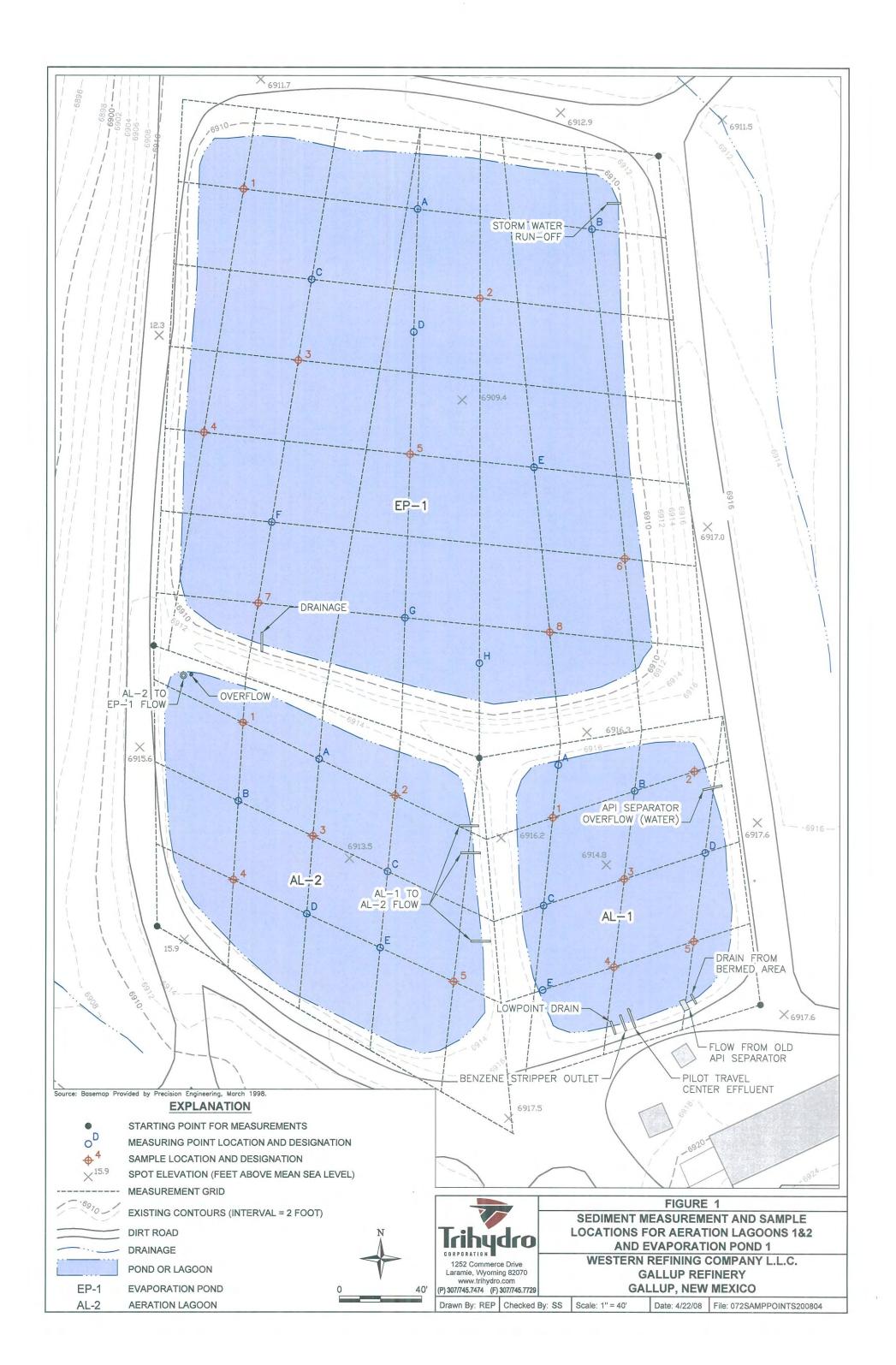
### TABLE 2. ANALYTICAL DATA SUMMARY, GALLUP REFINERY, WESTERN REFINING COMPANY, GALLUP, NEW MEXICO

			TPH				Me	tals							SVOCs												VC	Cs							
Sample ID	Sample Depth (ft below top of sediment)	DRO (mg/kg)	MRO (mg/kg)	GRO (mg/kg)	Mercury (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Benzo(a) anthracene (mg/kg)	Chrysene (mg/kg)	Fluorene (mg/kg)	2-Methyl naphthalene as SVOC (mg/kg)	3+4- Methylphenol (mg/kg)	Naphthalene as SVOC (mg/kg)	Phenanthrene (mg/kg)	Phenol (mg/kg)	Pyrene (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	MTBE (mg/kg)	1,2,4 - Trimethyl benzene (mg/kg)	1,3,5- Trimethyl benzene (mg/kg)	Napthalene as VOC (mg/kg)	1-Methyl napthalene (mg/kg)	2-Methyl naphthalene as VOC (mg/kg)	Carbon disulfide (mg/kg)	lsopropyl benzene (mg/kg)	4-lsopropyl toluene (mg/kg)	n-Butylbenzne (mg/kg)	n-Propyl benzene (mg/kg)	sec- Butylbenzene (mg/kg)	Xylenes (mg/kg)
AL1-1-SS	4.8	71000	ND	300	19	29	140	0.64	44	23	ND	ND	ND	190	ND	53	50	34	ND	3.6	17	4.3	ND	11	2.7	10	13	21	ND	0.64	ND	0.65	1.4	ND	27
AL1-2-SS	2.3	190000	25000	560	11	11	190	0.69	19	79	ND	ND	70	460	42	79	210	35	39	5.1	32	10	1.1	26	6.7	19	42	44	ND	1.8	1	2.6	4.7	1.9	56
AL1-3-SS	3.3	54000	ND	170	7	12	210	0.18	16	25	ND	ND	36	200	ND	41	84	ND	ND	1.3	5.7	1.8	ND	6.7	1.7	4	10	15	ND	ND	ND.	1.7	0.85	0.82	12
AL1-4-SS	5.6	190000	ND	280	9.5	9.5	280	0.48	24	38	ND	33	91	530	ND	94	200	ND	44	4.2	19	5.7	ND	18	4.1	14	28	45	ND	0.79	0.56	1.3	2.4	1.3	33
AL1-5-SS	0.8	220000	ND	280	9.9	12	360	0.2	13	30	ND	ND	84	600	ND	110	220	ND	ND	5.9	24	6.1	1.1	16	4	14	29	43	ND	1.2	0.71	3	2.5	1.2	35
AL1-1-HP	5.5	7200	ND	240	3.1	11	150	1.2	40	23	ND	ND	ND	23	6.2	6.7	8.4	6.7	ND	1.2	6.8	2.9	ND	12	3.3	7.2	15	22	ND	0.72	0.54	2.7	1.7	0.96	18
AL1-2-HP	3.0	200000	37000	260	5	32	350	1.4	51	110	ND	34	40	260	98	65	140	54	ND	2.4	11	3.4	ND	10	2.8	6.5	14	20	ND	0.58	ND	2.1	1.5	0.8	20
AL1-3-HP	3.8	110000	ND	150	6.7	11	220	0.12	16	22	ND	ND	40	200	ND	36	100	ND	ND	2	7	1.9	ND	8.3	2	5.9	15	20	ND	0.51	0.53	2.1	1.2	0.89	12
AL1-4-HP	5.1	76000	ND	590	8.3	47	310	1.4	60	220	ND	31	ND	340	ND	90	84	ND	ND	3.2	22	11	ND	37	10	21	29	46	ND	1.6	0.84	7	5.9	1.8	60
AL1-5-HP	3.4	130000	25000	670	18	31	450	0.79	46	110	ND	ND	47	460	47	110	130	ND	ND	9	48	15	0.74	26	7.4	19	28	42	ND	2.6	0.9	4.9	4.8	1.9	81
AL2-1-SS	6.0	50000	ND	ND	8.4	20	260	6.6	30	48	ND	ND	ND	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AL2-2-SS	4.5	260000	31000	ND	6.8	13	500	0.32	21	24	ND	ND	98	450	ND	38	230	ND	ND	ND	2.1	0.72	ND	4.5	1.1	5.8	26	37	ND	ND	ND	1	ND	ND	4.9
AL2-3-SS	0.5	300000	29000	ND	8.9	8.4	350	0.42	14	24	ND	32	43	300	ND	ND	250	ND	47	ND	1.2	ND	ND	2.9	0.54	4.6	21	27	ND	ND	ND	0.66	ND	ND	2.8
AL2-4-SS	3.0	250000	35000	ND	8.1	14	190	0.42	16	32	ND	ND	44	190	ND	44	210	ND	ND	ND	1.6	0.56	ND	4.1	0.72	5.4	24	30	ND	ND	ND	1.1	ND	ND	4
AL2-5-SS	0.5	370000	ND	430	6.8	4.6	310	0.31	12	18	ND	ND	70	550	ND	85	250	ND	36	2.3	18	6.4	ND	17	5.6	15	43	35	ND	1.7	1	3.4	3	2	39
AL2-1-HP	7.4	120000	28000	ND	7.4	18	81	2.4	29	32	ND	42	ND	ND	99	ND	50	ND	38	ND	0.6	ND	ND	0.93	ND	ND	2.5	2.4	ND	ND	ND	ND	ND	ND	1.9
AL2-2-HP	9.8	130000	ND	ND	6.4	20	300	0.73	22	39	ND	ND	36	140	36	ND	93	ND	ND	ND	1.1	ND	ND	3	0.71	3.2	11	15	ND	ND	ND	0.56	ND	ND	3.8
AL2-3-HP	9.1	110000	ND	ND	2.1	9.8	280	0.26	15	12	ND	ND	32	110	44	ND	89	ND	ND	ND	0.53	0.62	ND	3.8	0.87	3.4	12	17	ND	ND	ND	0.89	ND	ND	4.3
AL2-4-HP	8.4	140000	29000	ND	6.4	21	270	5.2	45	55	ND	ND	ND	57	100	ND	55	43	ND	ND	1.1	ND	ND	ND	ND	1.6	5.7	7.2	ND	ND	ND	ND	ND	ND	3.2
AL2-5-HP	7.5	51000	ND	ND	4.7	14	160	0.62	53	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.1	ND	1.2	5.4	6.6	5.8	ND	ND	ND	ND	ND	1.8
EP1-1	1.1	200000	ND	ND	6.8	5.4	400	0.45	9.7	16	ND	45	53	370	53	31	330	ND	47	ND	0.51	ND	ND	1.5	ND	2.6	12	16	ND	ND	ND	ND	ND	ND	ND
EP1-2	1.1	150000	ND	ND	4.4	17	190	0.58	24	18	ND	ND	ND	58	34	ND	71	ND	ND	ND	0.51	ND	ND	1.4	ND	1.4	5.8	7.7	ND	ND	ND	ND	ND	ND	1
EP1-3	1.5	110000	ND	ND	5.1	6.5	220	0.43	13	15	ND	ND	47	140	60	ND	130	ND	ND	ND	0.68	ND	ND	1.2	ND	1.3	4.9	6.8	ND	ND	ND	ND	ND	ND	1.1
EP1-4	1.1	130000	27000	ND	9.6	26	330	6.4	41	39	ND	ND	59	180	86	ND	210	ND	40	ND	0.65	ND	ND	1.3	ND	1.7	6	7.6	ND	ND	ND	ND	ND	ND	1.2
EP1-5	1.1	120000	ND	ND	6	23	150	0.97	23	22	ND	57	42	130	140	ND	150	ND	48	ND	0.69	ND	ND	1.5	ND	1.9	7.1	10	ND	ND	ND	ND	ND	ND	1.7
EP1-6	0.8	180000	26000	ND	4.1	3.2	330	0.26	8.8	16	ND	40	70	210	ND	ND	150	ND	41	ND	0.63	ND	ND	2.2	ND	2.8	15	19	ND	ND	ND	ND	ND	ND	1.3
EP1-7	1.0	200000	25000	ND	4.4	3.6	280	0.27	8.3	9.7	35	74	77	260	ND	ND	240	ND	70	ND	ND	ND	ND	1.7	ND	1.7	9.1	12	ND	ND	ND	ND	ND	ND	ND
EP1-8	1.5	150000	ND	ND	4.9	11	120	0.8	58	15	ND	ND	41	110	ND	ND	120	ND	ND	ND	0.54	ND	ND	1.2	ND	1.6	8.1	11	ND	ND	ND	ND	ND	ND	ND
EPA Maximum Contaminants for the	Concentration of Toxicity Characteristic	d																																	
	or total constituent	NA	NA	NA	4	100	2000	20	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NMED Table A-1 S	Soil Screening Levels	NA	NA	NA	10000**	17.7	100000	564	3400*	800	23.4	2310	26500	NA	NA	300	20500	100000		25.8	252	128	984	213	69.2	300	NA	NA	460	389	NA	62.1	62.1	60.6	82

\*Chromium VI screening level used. \*\*Elemental Mercury screening level used. Bold concentrations indicate exceedence of EPA Maximum Concentration of Contaminants for the Toxicity Characteristic. Highlighted italic concentrations indicate exceedence of NMED Table A-1 Soil Screening Levels (Industrial).

FIGURES

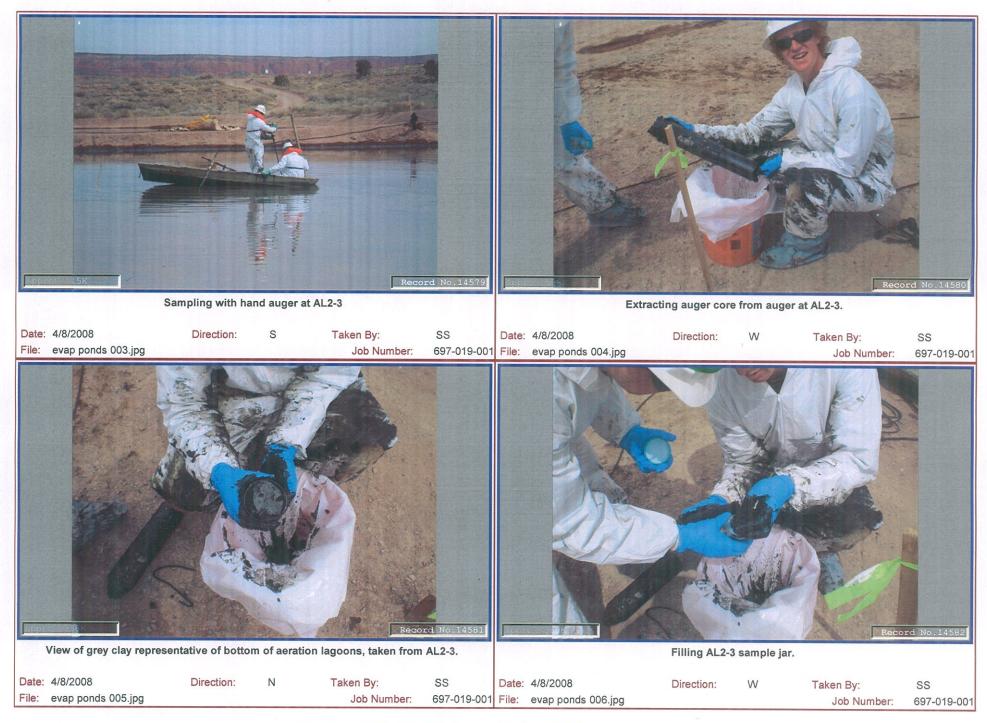


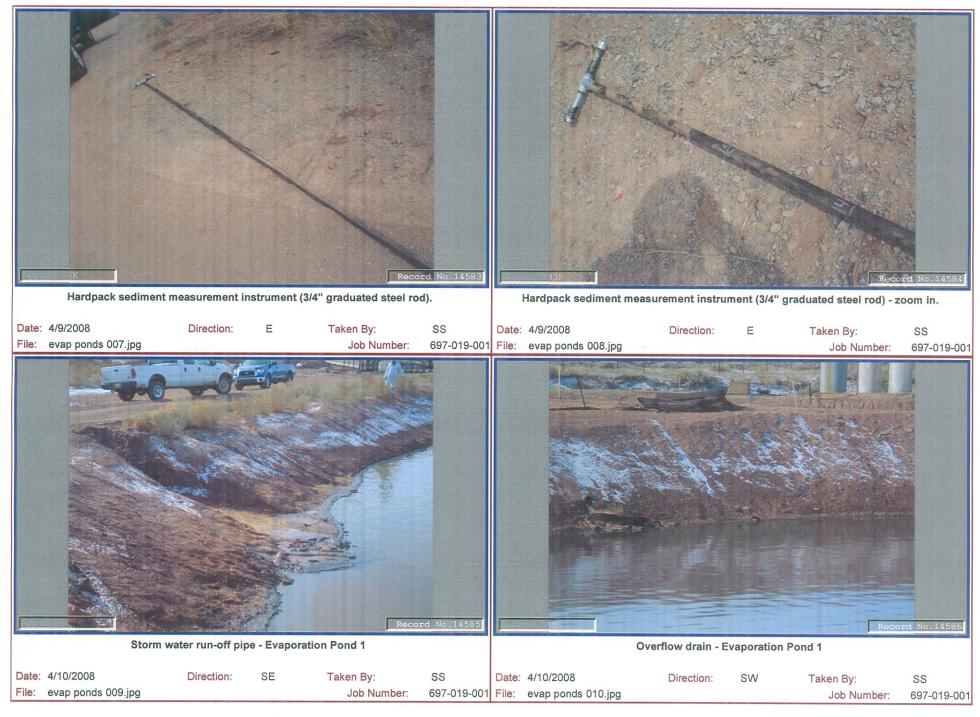


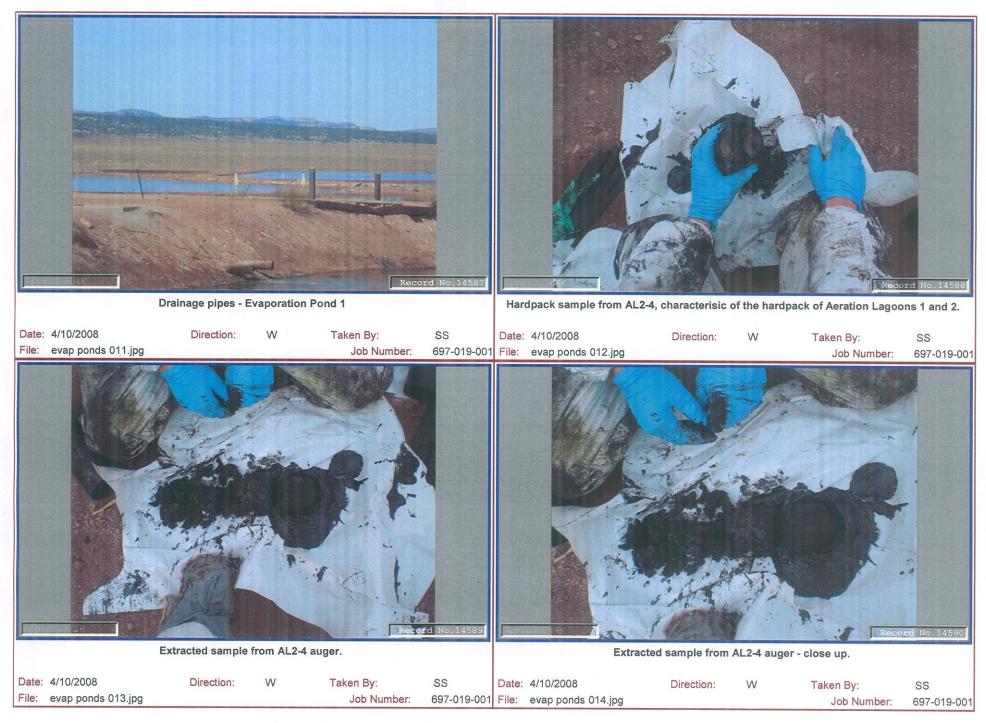
APPENDIX A

**INVESTIGATION PHOTOS** 

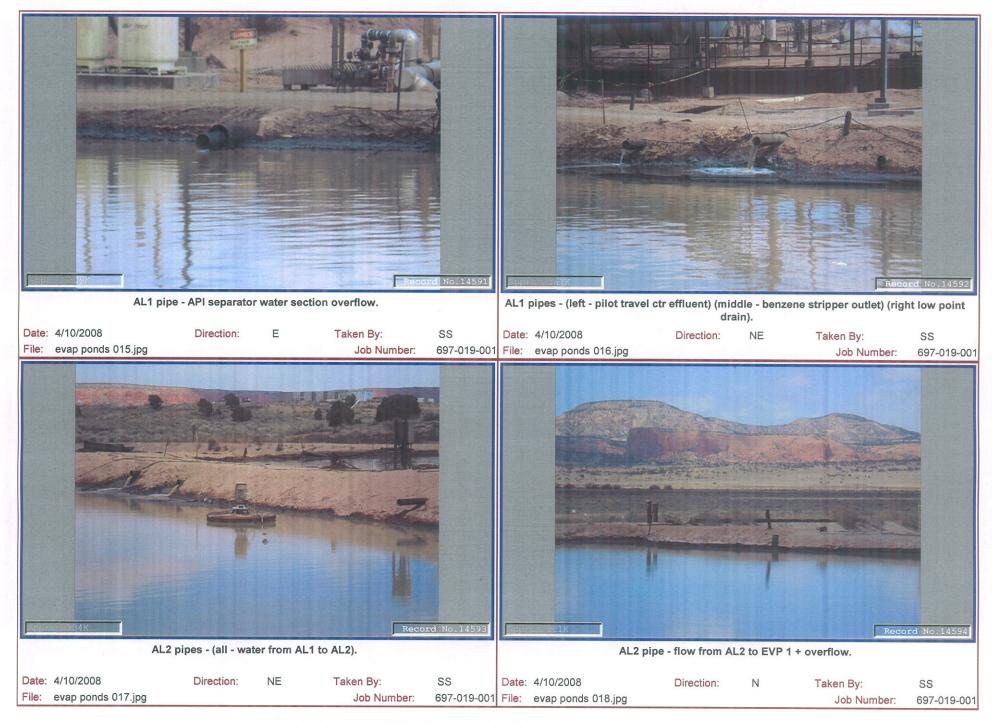


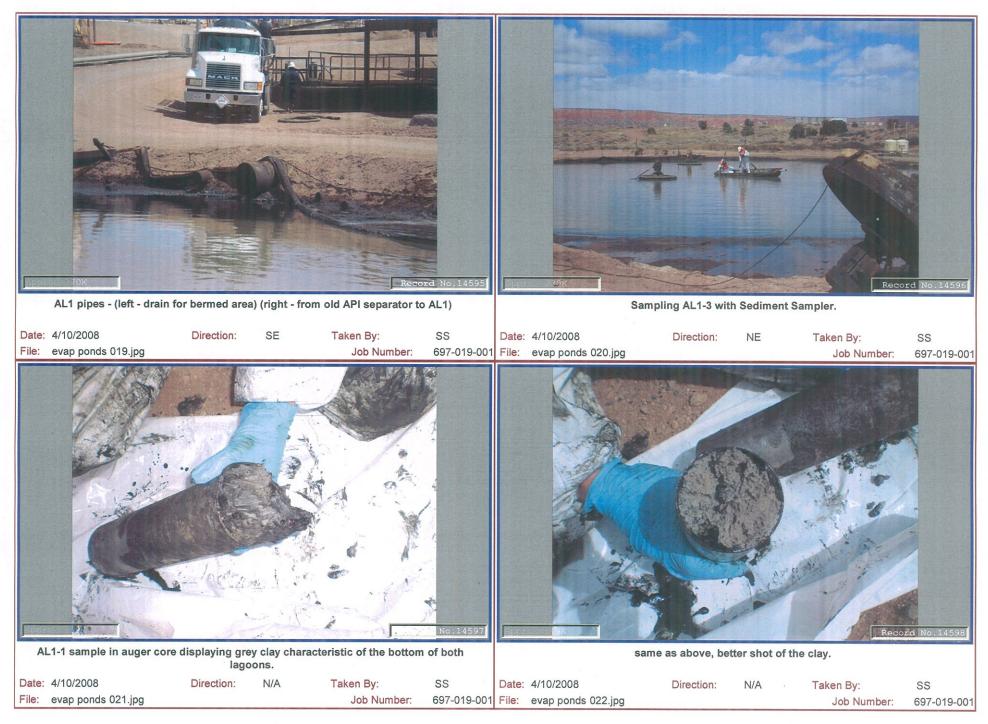






Date Printed 5/30/2008 9:30:19 AM





Date Printed 5/30/2008 9:30:23 AM



AL1-1 black silty sludge characteristic of the lower portion of most HP samples.

AL1-1 showing the fibrous roots and green staining.

Date	4/10/2008	Direction:	N/A	Taken By:	SS	Date:	4/10/2008	Direction:	N/A	Taken By:	SS
File:	evap ponds 023.jpg			Job Number:	697-019-001	File:	evap ponds 024.jpg			Job Number:	697-019-001



APPENDIX B

SEDIMENT SAMPLE FORMS





### **Sediment Sampling Field Form**

Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-1	Sample Date:	4/10/2008
Location:	Aeration Lagoon 1	Sample Time SS:	1710
Samplers:	GP/SM	Sample Time HP:	1525
Weather:	Cold, windy	Photo Numbers:	23-27

#### Sample Description

Auger (HP), sediment sampler (SS)
4.5' - 5'
5.3' - 5.7'

#### **Sample Description:**

Soft Sediment:

3.5' - 4.2' Black sludge, fluid, organic odor.

4.2' to 5' Black sludge, silty, green staining, soft, organic odor.

Note: upper portion of SS lost upon extraction - very fluid.

Hard Pack Sediment: 4.8' to 5.7' Refusal at 5.7'.

4.8' to 5.3' Black sludge, silty, abundant fibrous roots, some green staining, very soft, organic odor.

5.3' to 5.7' Grey clay, some silt/fine sand, green staining, soft, plastic, slight organic odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment

sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-2	Sample Date:	4/10/2008
Location:	See map	Sample Time SS:	1725
Samplers:	GP/SM	Sample Time HP:	1622
Weather:	Cold, windy	Photo Numbers:	None

## **Sample Description**

Sampling Equipment:	Auger (HP), sediment sampler (SS)
Sample Depth SS:	2' to 2.5'

2.7' to 3.3'

#### **Sample Description:**

Sample Depth HP:

Soft Sediment:

0'- 1' Black sludge, fluid, flows under own weight, very soft, organic odor.

1' - 2.5' SAA, green staining, trace silt, thicker than above, stays intact under own weight.

2.5' - 3.5' SAA, silty.

Hard Pack Sediment:

2.7' - 3.3' Black sludge, silty, very soft, organic odor, stays intact under own weight, consistency thickens with depth.

3.3' - 3.5' Grey clay, silty, some sand, soft, plastic, organic odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-3	Sample Date:	4/10/2008
Location:	See map	Sample Time SS:	1735
Samplers:	GP/SM	Sample Time HP:	1445
Weather:	Cold, windy	Photo Numbers:	22

#### Sample Description

Sampling Equipment:	Auger (HP), sediment sampler (SS)
Sample Depth SS:	3' - 3.5'
Sample Depth HP:	3.5' - 4'

#### Sample Description:

Soft Sediment:

0' - 1' Black sludge, fluid, flows under own weight, organic odor.

1' - 4' Black sludge, trace silt, slight green staining, very soft, barely intact under own weight, thicker w/depth, organic odor.

Hard Pack Sediment: 3.5' - 4.3'. Refusal at 4.3'.

3.5' - 4' Soupy black sludge, trace of fines, organic odor, somewhat fluid, very soft.

4' - 4.3' Grey clay, some silt/fine sand, soft, plastic, organic odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-4	Sample Date:	4/10/2008
Location:	See map	Sample Time SS:	1755
Samplers:	GP/SM	Sample Time HP:	1050
Weather:	Cold, windy	Photo Numbers:	None

## Sample Description

Sampling Equipment:	Auger (HP), sediment sampler (SS)
Sample Depth SS:	5.3' - 5.8'
Sample Depth HP:	4.8' - 5.3'

#### **Sample Description:**

Soft Sediment:

5.3' - 6.5' Black silty sludge, intact under own weight, some roots, slight green tint, thicker w/depth, organic odor.

Note: upper portion of SS lost during extraction, very fluid.

Hard Pack Sediment: 4.6' - 5.4' Refusal at 5.4'.

4.6' - 4.8' Black sludge, soupy, fluid, ammonia/organic odor, very soft.

4.8' - 5.3' SAA, thicker, slight green tint.

5.3' - 5.4' Grey clay, soft, some sand/silt, plastic, same odor as above.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL1-5	Sample Date:	4/10/2008
Location:	See map	Sample Time SS:	800
Samplers:	GP/SM	Sample Time HP:	1020
Weather:	Cold, windy	Photo Numbers:	None

## Sample Description

Sampling Equipment: <u>Auger (HP), sediment sampler (St</u>	S)
---	----

Sample Depth SS:	0.5' - 1'	

Sample Depth HP: <u>3' - 3.7'</u>

#### **Sample Description:**

Soft Sediment:

0' - 3' Black silty sludge, stays intact under own weight, light green tint, very soft, some roots, organic odor.

Hard Pack Sediment: <u>3' - 3.8' Refusal at 3.8'</u>

3' - 3.7' Black sludge, stays intact under own weight, very soft, slight green tint, slight ammonia/organic odor.

3.7' - 3.8' Light grey clay, some fine sand, soft, plastic, same ammonia/organic odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-1	Sample Date:	4/8/2008 - 4/9/2008
Location:	See map	Sample Time SS:	1010 4/9/2008
Samplers:	GP/SM	Sample Time HP:	1105 4/8/2008
Weather:	Cold, breezy	Photo Numbers:	None

#### Sample Description

Sampling Equipment:	Auger (HP), sediment sampler (SS)
Sample Depth SS:	5.5' - 6.5'
Sample Depth HP:	7' - 7.8'

#### Sample Description:

Soft Sediment:

0'- 1.5' Black sludge, soupy, fluid, organic odor.

1.5' - 6.5' Black sludge, much thicker, light green tint, soft, horse manure odor, plastic, fibrous roots, organic material, fibrous.

Hard Pack Sediment:

7' - 7.8' Black sludge, silty, some clay, roots (fuzzy), slight ammonia odor, soft, plastic.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-2	Sample Date:	4/8/2008
Location:	See map	Sample Time SS:	1555
Samplers:	GP/SM	Sample Time HP:	1515
Weather:	Cold, light wind	Photo Numbers:	3-6

#### Sample Description

Sampling Equipment:	Auger (HP), sediment sampler (SS)
Sample Depth SS:	4' - 5'
Sample Depth HP:	6.4' - 6.8'

#### **Sample Description:**

Soft Sediment:

0'- 6' Black sludge, soupy, thicker towards bottom (~2'- 6'), slight organic odor, not ammonia.

Hard Pack Sediment: 6.4

6.4' - 7.3' Refusal at 7.3'.

6.4' - 6.8' Black sludge, very soft, soupy, some roots, slight odor, fluid, trace of green throughout.

6.8' - 7.3' Grey clay, some silt-fine sand, soft, plastic, trace gravel, roots, no odor, red in lowest inch.

Comments: BD-1 collected at 4' - 5'

Auger became stuck in mud at 7.3'. Had to pull out with truck. Bent auger extension, sample from 6.4' - 7.3' retrieved.

Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment

sampler and hard-pack sediment was defined as the deepest interval able to be collected with the hand auger.

.



Project Name:	Gallup Refinery	Sample Media:	Sediment	
Sample ID:	AL2-3	Sample Date:	4/8/2008 - 4/9/2008	
Location:	See map	Sample Time SS:	1000 (4/9/2008)	
Samplers:	GP/SM	_ Sample Time HP:	1215 (4/8/2008)	
Weather:	Warm, breezy	_ Photo Numbers:	3	

## Sample Description

Sampling Equipment:	Auger (HP), sediment sampler (SS)
Sample Depth SS:	<u>0' - 1'</u>
Sample Depth HP:	8.8' - 9.4'

#### Sample Description:

Soft Sediment:

0'- 5.5' Black sludge, very soft, fluid, thicker with depth, organic odor, plastic, trace roots throughout.

Hard Pack Sediment:

8.8' - 9.6' Refusal at 9.6'.

8.8' - 9.4' Black silty sludge, somewhat soupy, slight ammonia odor, very soft, plastic.

9.4' - 9.6' Grey clay, some silt and fine sand, medium soft, plastic.

Comments: MS/MSD were collected at this location from 0' - 1'. Auger was very difficult to pull.

Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-4	Sample Date:	4/8/2008 ~ 4/9/2008
Location:	See map	Sample Time SS:	1025 (4/9/2008)
Samplers:	GP/SM	Sample Time HP:	1015 (4/8/2008)
Weather:	Cool, breezy	Photo Numbers:	

## **Sample Description**

Sampling Equipment:	Auger (HP), sediment sampler (SS)
Sample Depth SS:	2.5' - 3.5'
Sample Depth HP:	8' - 8.8'

#### Sample Description:

Soft Sediment:

0'- 1.5' Black sludge, very fluid, very soft, organic odor.

1.5' - 6.5' Black sludge, soft, but slightly thicker than other AL2 locations, organic odor, plastic.

Hard Pack Sediment:

8' - 8.8' Black sludge w/some silt, soft, plastic, ammonia odor, some fibrous roots.

Comments: BD-2 collected at 2.5' - 3.5'.

Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	AL2-5	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	940
Samplers:	GP/SM	Sample Time HP:	820
Weather:	Cold, windy	Photo Numbers:	None

## Sample Description

Sampling Equipment:	Auger (HP), sediment sampler (SS)
Sample Depth SS:	0' - 1'
Sample Depth HP:	7.2' - 7.8'

#### **Sample Description:**

Soft Sediment:

0'-1.5' Black sludge, very soft, fluid, organic odor. Lower 5' of soft sediment lost during retrieval.

Hard Pack Sediment:

7.2' - 7.8' Black sludge, trace fines, slight odor, very soft, plastic.

7.8' - 8' Reddish-grey clay, sandy, fine grained, soft, plastic, no odor.

Comments: Soft sediment and hard-pack measurements used for volume calculations were collected with

the graduated PVC and steel pipes as described in the report. The descriptions above were taken during sediment sampling.

During sampling activities, soft sediment was defined as the deepest interval that was able to be collected with the sediment



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-1	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1825
Samplers:	GP/SM	Sample Time HP:	X
Weather:	Cold, windy	Photo Numbers:	None

## Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.8' - 1.3'
Sample Depth HP:	X

#### **Sample Description:**

Soft Sediment:

0' - 0.8' Soupy black sludge, flows under own weight, slight green tint, strong manure smell, too soupy to sample.

0.8' - 1.6' Black sludge, thicker than above, still soupy, very soft, strong manure odor, almost fluid, green tint.

1.6' - 2.2' Black sludge, thicker than above, soft, clayey, less odor, no green, some silt/sand in lowest 2".

Hard Pack Sediment:

None.

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-2	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1845
Samplers:	GP/SM	Sample Time HP:	<u>x</u>
Weather:	Cold, breezy	Photo Numbers:	None

## Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.8' - 1.3'
Sample Depth HP:	<u>X</u>

#### **Sample Description:**

Soft Sediment:

0' - 0.8' Soupy black sludge, too thin to sample, flows under own weight, slight organic odor.

0.8' - 1.6' Black sludge, thicker than above, stays intact under own weight, some roots, slight odor,

trace clayey, silty sand in lower 2", very soft.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-3	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1815
Samplers:	GP/SM	Sample Time HP:	<u>x</u>
Weather:	Cold, very windy	Photo Numbers:	None

## Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	1.2' - 1.7'
Sample Depth HP:	X

#### **Sample Description:**

Soft Sediment:

0' - 1.2' Soupy black sludge, fluid, organic odor, slightly thicker w/depth, flows under own weight

1.2' - 1.7' Black sludge, thicker than above, cohesive, remains intact under own weight, very soft, slightly clayey, organic odor,

sandy & silty in lowest inch.

Hard Pack Sediment:

None.

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-4	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1800
Samplers:	GP/SM	Sample Time HP:	<u>×</u>
Weather:	Cold, windy	Photo Numbers:	None

## Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.8' - 1.3'
Sample Depth HP:	<u>X</u>

#### Sample Description:

Soft Sediment:	
----------------	--

0' - 0.7' Soupy black sludge, fluid, too fluid in sample, organic odor, very soft.

0.7' - 1.3' Black sludge, very soft, cohesive, organic odor, slightly clayey.

1.3' - 1.5' SAA, some silt, sand, and gravel.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-5	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1745
Samplers:	GP/SM	Sample Time HP:	<u>X</u>
Weather:	Cold, windy	Photo Numbers:	None

#### Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.8' - 1.3'
Sample Depth HP:	Х

#### **Sample Description:**

Soft Sediment:

0' - 0.3' Black sludge, soupy, fluid, organic odor, very soft.

0.3' - 1.3' Black sludge, thicker, cohesive, organic odor, very soft, slightly clayey.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-6	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1510
Samplers:	GP/SM	Sample Time HP:	<u>X</u>
Weather:	Cold, windy	Photo Numbers:	None

## Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.5' - 1.0'
Sample Depth HP:	X

#### **Sample Description:**

Soft Sediment:

0' - 0.5' Soupy black sludge, very thin, too thin to sample, fluid, slight organic odor.

0.5' - 1.3' Soupy black sludge, slightly thicker than above, still flows under own weight, just thick enough to sample,

slight organic odor.

1.3' - 1.5' Black sludge, clayey, silty, some fine sand, stays intact under own weight, soft, plastic, slight organic odor.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-7	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1935
Samplers:	GP/SM	Sample Time HP:	Х
Weather:	Cold, very windy	Photo Numbers:	None

#### Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	0.7' - 1.2'
Sample Depth HP:	х

#### **Sample Description:**

Soft Sediment:

0' - 0.7' Extremely soupy black sludge, very fluid, too thin to sample, slight organic odor.

0.7' - 1.2' Soupy black sludge, flows under own weight, slightly thicker than above, slight organic odor, no fines or sand.

Hard Pack Sediment:

None

Comments: May have lost a few inches out of core on retrieval.

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated



Project Name:	Gallup Refinery	Sample Media:	Sediment
Sample ID:	EP1-8	Sample Date:	4/9/2008
Location:	See map	Sample Time SS:	1917
Samplers:	GP/SM	Sample Time HP:	<u>x</u>
Weather:	Cold, very windy	Photo Numbers:	None

## Sample Description

Sampling Equipment:	Sediment sampler
Sample Depth SS:	1.2' - 1.7'
Sample Depth HP:	X

#### **Sample Description:**

Soft Sediment:

0' - 0.8' Soupy black sludge, very thin, flows readily under own weight, too thin to sample, slight organic odor.

0.8' - 1.7' Soupy black sludge, slightly thicker than above, still flows under own weight, no fines or sand in lower portions

as with most other EP1 samples, slight organic odor.

Hard Pack Sediment:

None

Comments:

There was no hard-pack detected in Evaporation Pond 1. Sediment measurements were collected with a graduated



## COVER LETTER

Tuesday, April 29, 2008

Regina Allen Western Refining Southwest, Gallup Rt. 3 Box 7 Gallup, NM 87301

TEL: (505) 722-3833
 FAX (505) 722-0210

RE: Evaporation Pond/Aeration Lagoon

Order No.: 0804138

Dear Regina Allen:

Hall Environmental Analysis Laboratory, Inc. received 34 sample(s) on 4/11/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Business Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001



4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109 505.345.3978 ■ Fax 505.345.4107 www.hallenvironmental.com

Date: 29-Apr-08

l.

CLIENT:	Western Refining Southwest, Gallup	
Project:	Evaporation Pond/Aeration Lagoon	CASE NARRATIVE
Lab Order:	0804138	

"S" flags denote that the surrogate was not recoverable, or low, due to sample dilution and/or matrix interferences.

.

Client Sample ID: EP1-3 Western Refining Southwest, Gallup CLIENT: Collection Date: 4/9/2008 6:15:00 PM 0804138 Lab Order: **Evaporation Pond/Aeration Lagoon** Date Received: 4/11/2008 **Project:** Matrix: SOIL 0804138-01 Lab ID: DF **Date Analyzed PQL Qual Units** Result Analyses Analyst: SCC EPA METHOD 8015B: DIESEL RANGE ORGANICS 50 4/16/2008 9:43:15 PM 5000 mg/Kg 110000 Diesel Range Organics (DRO) 4/16/2008 9:43:15 PM 25000 mg/Kg 50 ND Motor Oil Range Organics (MRO) 4/16/2008 9:43:15 PM %REC 50 61.7-135 0 S Surr: DNOP Analyst: NSB EPA METHOD 8015B: GASOLINE RANGE mg/Kg 20 4/18/2008 4:08:55 AM ND 100 Gasoline Range Organics (GRO) %REC 20 4/18/2008 4:08:55 AM 84-138 100 Surr: BFB Analyst: SNV EPA METHOD 7471: MERCURY 4/18/2008 4:31:44 PM mg/Kg 50 5.1 16 Mercury Analyst: NMO EPA METHOD 6010B: SOIL METALS 4/16/2008 8:17:06 AM 1 2.5 mg/Kg 6.5 Arsenic 10 4/16/2008 9:24:16 AM mg/Kg 220 1.0 Barium 4/16/2008 8:17:06 AM 0.43 0.10 mg/Kg 1 Cadmium 0.30 mg/Kg 1 4/16/2008 8:17:06 AM 13 Chromium 4/16/2008 8:17:06 AM 15 0.25 mg/Kg 1 Lead mg/Kg 10 4/16/2008 9:24:16 AM ND 25 Selenium 4/16/2008 8:17:06 AM 1 0.25 mg/Kg ND Silver Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 4/17/2008 30 mg/Kg 1 ND Acenaphthene 30 mg/Kg 1 4/17/2008 ND Acenaphthylene mg/Kg 1 4/17/2008 30 NĎ Aniline 4/17/2008 1 30 mg/Kg ND Anthracene 4/17/2008 30 mg/Kg 1 ND Azobenzene 4/17/2008 ND 30 mg/Kg 1 Benz(a)anthracene 4/17/2008 ND 30 mg/Kg 1 Benzo(a)pyrene 4/17/2008 30 mg/Kg 1 ND Benzo(b)fluoranthene 4/17/2008 75 1 ND mg/Kg Benzo(g,h,i)perylene 30 1 4/17/2008 ND mg/Kg Benzo(k)fluoranthene 50 mg/Kg 1 4/17/2008 ND Benzoic acid 4/17/2008 30 mg/Kg 1 ND Benzyl alcohol 4/17/2008 30 mg/Kg 1 ND Bis(2-chloroethoxy)methane 4/17/2008 1 30 ND mg/Kg Bis(2-chloroethyl)ether 4/17/2008 ND 30 mg/Kg 1 Bis(2-chloroisopropyl)ether 4/17/2008 ND 75 mg/Kg 1 Bis(2-ethylhexyl)phthalate ND 30 mg/Kg 1 4/17/2008 4-Bromophenyl phenyl ether ND 30 mg/Kg 1 4/17/2008 Butyl benzyl phthalate 30 mg/Kg 1 4/17/2008 ND Carbazole 75 4/17/2008 ND mg/Kg 1 4-Chloro-3-methylpheno! 4/17/2008 1 75 mg/Kg ND 4-Chloroaniline Analyte detected in the associated Method Blank Value exceeds Maximum Contaminant Level в Qualifiers: \* Holding times for preparation or analysis exceeded H Е Value above quantitation range MCL Maximum Contaminant Level Analyte detected below quantitation limits J Reporting Limit RL. Not Detected at the Reporting Limit ND Page 1 of 128

#### Hall Environmental Analysis Laboratory, Inc.

Spike recovery outside accepted recovery limits

S

Date: 29-Apr-08

CLIENT:	Western Refining	Southwest, Gallup			Sample II				
Lab Order:	0804138			Colle	ction Date	e: 4/9/2008	6:15:00 PM		
Project:	Evaporation Pond/	Aeration Lagoon		Date	Received	<b>1:</b> 4/11/2008			
Lab ID:	0804138-01				Matrix	x: SOIL			
Analyses		Result	PQL	Qual U	nits	DF	Date Analyzed		
	8270C: SEMIVOLATI	LES					Analyst: JDC		
2-Chloronaphth		ND	38	m	g/Kg	1	4/17/2008		
2-Chlorophenol		ND	30	m	g/Kg	1	4/17/2008		
4-Chlorophenyl		ND	30	m	g/Kg	1 .	4/17/2008		
Chrysene		ND	30	m	g/Kg	1	4/17/2008		
Di-n-butyl phtha	alate	ND	75	m	g/Kg	1	4/17/2008		
Di-n-octyl phtha		ND	30	m	g/Kg	1	4/17/2008		
Dibenz(a,h)anti		ND	30	m	g/Kg	1	4/17/2008		
Dibenzofuran		ND	30		g/Kg	1	4/17/2008		
1,2-Dichlorober	nzene	ND	30		g/Kg	1	4/17/2008		
1,3-Dichlorober		ND	30		g/Kg	1	4/17/2008		
1.4-Dichlorober		ND	30		g/Kg	1	4/17/2008		
3,3'-Dichtorobe		ND	38		g/Kg	1	4/17/2008		
Diethyl phthalat		ND	30		g/Kg	1	4/17/2008		
Dimethyl phthal		ND	30		g/Kg	1	4/17/2008		
2,4-Dichlorophe		ND	30		g/Kg	1	4/17/2008		
2,4-Dimethylph		ND	45		g/Kg	1	4/17/2008		
		ND	75		g/Kg	1	4/17/2008		
4,6-Dinitro-2-m	-	ND	75		g/Kg	1	4/17/2008		
2,4-Dinitrophen		ND	75		g/Kg	1	4/17/2008		
2,4-Dinitrotolue		ND	75		g/Kg	1	4/17/2008		
2,6-Dinitrotolue	ne	ND	38		g/Kg	1	4/17/2008		
Fluoranthene		47	30		g/Kg	1	4/17/2008		
Fluorene					-	1	4/17/2008		
Hexachloroben		ND	30		g/Kg a/Kg	1	4/17/2008		
Hexachlorobuta		ND	30		g/Kg a/Ka	1	4/17/2008		
Hexachlorocycl		ND	30		g/Kg =/Ka		4/17/2008		
Hexachloroetha		ND	30		g/Kg =/K=	1			
Indeno(1,2,3-co	i)pyrene	ND	38		g/Kg	1	4/17/2008 4/17/2008		
Isophorone	_	ND	75		g/Kg =//(=	1			
2-Methylnaphth		140	38		g/Kg =/K=	1	4/17/2008 4/17/2008		
2-Methylphenol		ND	75		g/Kg = #K-r	1			
3+4-Methylphe		60	30		g/Kg	1	4/17/2008		
N-Nitrosodi-n-p		ND	30		g/Kg	1	4/17/2008		
N-Nitrosodipher	nylamine	ND	30		g/Kg	1	4/17/2008		
Naphthalene		ND	30		g/Kg	1	4/17/2008		
2-Nitroaniline		ND	30		g/Kg	1	4/17/2008		
3-Nitroanillne		ND	30		g/Kg _/Kg	1	4/17/2008		
4-Nitroaniline		ND	38		g/Kg -≪-	1	4/17/2008		
Nitrobenzene		ND	75		g/Kg - "K-	1	4/17/2008		
2-Nitrophenol		ND	30		g/Kg	1	4/17/2008		
4-Nitrophenoi		ND	30		g/Kg	1	4/17/2008		
Pentachlorophe Phononthrope	enol	ND 130	50 30		g/Kg g/Kg	1	4/17/2008 4/17/2008		
Phenanthrene									
Vummeran		um Contaminant Level		B	-		ected in the associated Method Blank		
	E Value above quantitat	-		Н	-		tion or analysis exceeded		
	J Analyte detected below			MCI		n Contaminant L	evel		
N	D Not Detected at the Re	-		RĹ	Reporting	; Limit	Page 2 of		
	S Spike recovery outside	e accepted recovery limits	5 -						

# Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

····

CLIENT:	Western Refining South	west, Gallup		Client Sample ID: Collection Date:		15:00 PM	
Lab Order:	0804138						
Project:	Evaporation Pond/Aerat	ion Lagoon		Date Received:			
Lab ID:	0804138-01	,		Matrix:			
Analyses		Result	PQL	Qual Units	DF	Date Analyzed	
EPA METHOD	8270C: SEMIVOLATILES					Analyst: JDC	
Phenol		ND	30	mg/Kg	. 1	4/17/2008	
Pyrene		ND	30	mg/Kg	1	4/17/2008	
Pyridine		ND	75	mg/Kg	1	4/17/2008	
1,2,4-Trichloreb	enzene	ND	30	mg/Kg	1	4/17/2008	
2,4,5-Trichlorop		ND	30	mg/Kg	1	4/17/2008	
2,4,6-Trichlorop		ND	30	mg/Kg	<b>^</b> 1	4/17/2008	
	ribromophenot	53.6	35.5-141	%REC	1	4/17/2008	
Surr: 2-Fluor		65.7	30.4-128	%REC	1	4/17/2008	
Surr: 2-Fluor		86.3	28.1-129	%REC	1	4/17/2008	
Surr: 4-Terpl		41.9	34.6-151	%REC	1	4/17/2008	
Surr: Nitrobe		81.0	26.5-122	%REC	1	4/17/2008	
Surr: Phenol		70.0	37.6-118	%REC	1	4/17/2008	
	8260B: VOLATILES					Analyst: BDF	
Benzene		ND	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
Toluene		0.68	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
Ethylbenzene		ND	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
Methyl tert-buty	d ether (MTBE)	ND	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
1,2,4-Trimethyl		1.2	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
1,3,5-Trimethyl		ND	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
1,2-Dichloroeth		ND	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
1,2-Dicrioroeth		ND	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
Naphthalene		1.3	1.0		10	4/19/2008 1:50:50 PM	
1-Methylnaphth	alene	4.9	2.0		10	4/19/2008 1:50:50 PM	
		6.8	2.0		10	4/19/2008 1:50:50 PM	
2-Methylnaphth	IAIO I IO	ND	7.5		10	4/19/2008 1:50:50 PM	
Acetone Bromobenzene		ND	0.50		10	4/19/2008 1:50:50 PM	
Bromodichloro		ND	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
		ND	0.50		10	4/19/2008 1:50:50 PM	
Bromoform Bromomethane		ND	1.0		10	4/19/2008 1:50:50 PM	
2-Butanone	3	ND	5.0		10	4/19/2008 1:50:50 PM	
Carbon disulfid	<b>A</b>	ND	5.0		10	4/19/2008 1:50:50 PM	
Carbon tetrach		ND	1.0	- 1	10	4/19/2008 1:50:50 PM	
Chlorobenzene		ND	0.50	mg/Kg	10	4/19/2008 1:50:50 PM	
Chloroethane	•	ND	1.0		10	4/19/2008 1:50:50 PM	
Chloroform		ND	0.50		10	4/19/2008 1:50:50 PM	
Chloromethane	2	ND	0.50	• =	10	4/19/2008 1:50:50 PM	
2-Chlorotoluen		ND	0.50	• -	10	4/19/2008 1:50:50 PM	
4-Chiorotoluen		ND	0.50		10	4/19/2008 1:50:50 PM	
		ND	0.50		10	4/19/2008 1:50:50 PM	
cls-1,2-DCE		ND	0.50		10	4/19/2008 1:50:50 PM	
cis-1,3-Dichlor	-chloropropane	* ND	1.0		10	4/19/2008 1:50:50 PM	

Date: 29-Apr-08

I.

#### Value exceeds Maximum Contaminant Level Qualifiers: ۴

- Е Value above quantitation range
- Analyte detected below quantitation limits J
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits S
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

.

CLIENT:	Western Refining	Southwest, Gallup			t Sample I				
Lab Order:	0804138			Collection Date: 4/9/2008 6:15:00 PM					
Project:	Evaporation Pond/	Aeration Lagoon		Da	ate Receive	ed: 4/11/2008			
Lab ID:	0804138-01				Matr	ix: SOIL			
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed		
÷	8260B: VOLATILES				· · · ·		Analyst: BDł		
Dibromochioror		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
Dipromometha		ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM		
1,2-Dichlorober	120R0	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1,3-Dichlorober		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1,4-Dichlorober		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
Dichlorodifluoro		ND	0.60		mg/Kg	10	4/19/2008 1:50:50 PM		
1.1-Dichloroeth	ane	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM		
1,1-Dichloroeth		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1.2-Dichloropro		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1.3-Dichloropro	•	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
2,2-Dichloropro	•	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM		
1,1-Dichloropro	•	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM		
Hexachlorobuta	-	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM		
2-Hexanone		ND	5.0		mg/Kg	10	4/19/2008 1:50:50 PM		
Isopropylbenze	ne	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
4-Isopropyltolu		ND	0.60		mg/Kg	10	4/19/2008 1:50:50 PM		
4-Methyl-2-pen		ND	5.0		mg/Kg	10	4/19/2008 1:50:50 PM		
Methylene chlo		ND	1.5		mg/Kg	10	4/19/2008 1:50:50 PM		
n-Butylbenzene		NO	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
n-Propylbenze:		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
sec-Butylbenze		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
Styrene		ND	0,50		mg/Kg	10	4/19/2008 1:50:50 PM		
tert-Butylbenze	ne	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1,1,1,2-Tetrach		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1,1,2,2-Tetrach		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
Tetrachloroeth		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
trans-1,2-DCE		ND	0.60		mg/Kg	10	4/19/2008 1:50:50 PM		
trans-1,3-Dich	oropropene	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1,2,3-Trichlorol	• •	ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM		
1,2,4-Trichlorol		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1,1,1-Trichloro		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1.1.2-Trichloro		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
Trichloroethene		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
Trichlorofluoro		ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
1,2,3-Trichloro		ND	1.0		mg/Kg	10	4/19/2008 1:50:50 PM		
Vinyl chloride	· •	ND	0.50		mg/Kg	10	4/19/2008 1:50:50 PM		
Xylenes, Total		1. <b>1</b>	1.0		mg/Kg	10	4/19/2008 1:50:50 PM		
	chloroethane-d4	94.3	68.7-122		%REC	10	4/19/2008 1:50:50 PM		
	nofluorobenzene	89.3	79.3-126		%REC	10	4/19/2008 1:50:50 PM		
	ofluoromethane	79.0	64.4-119		%REC	10	4/19/2008 1:50:50 PM		
Surr: Toluen		101	86.5-121		%REC	10	4/19/2008 1:50:50 PM		

Date: 29-Apr-08

1

Qualifiers:

\*

- Value exceeds Maximum Contaminant Level
- Value above quantitation range E
- Analyte detected below quantitation limits J
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits S
- Analyte detected in the associated Method Blank В
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

---

CLIENT:	Western Refining Sou	thwest, Gallup			it Sample ID:				
Lab Order:	0804138			Co	llection Date:	4/9/2008 6	:00:00 PM		
Project:	Evaporation Pond/Aeration Lagoon			D	ate Received:	4/11/2008	/11/2008		
Lab ID:	0804138-02				Matrix:	SOIL			
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed		
•	8015B: DIESEL RANGE						Analyst: SCC		
Diesel Range O		130000	5000		mg/Kg	50	4/16/2008 10:17:20 PM		
-	•	27000	25000		mg/Kg	50	4/16/2008 10:17:20 PM		
Surr: DNOP	Organics (MRO)	0	61,7-135	S	%REC	50	4/16/2008 10:17:20 PM		
	8015B: GASOLINE RAN	IGE					Analyst: NSB		
	Organics (GRO)	ND	100		mg/Kg	20	4/18/2008 4:38:57 AM		
Surr: BFB		111	84-138		%REC	20	4/18/2008 4:38:57 AM		
	7471: MERCURY						Analyst: SNV		
Mercury		9.6	1.6		mg/Kg	50	4/18/2008 4:33:14 PM		
	6010B: SOIL METALS						Analyst: NMC		
Arsenic		26	2.5		mg/Kg	1	4/21/2008 9:26:55 AM		
Barium		330	1.0		mg/Kg	10	4/21/2008 11:36:15 AM		
Cadmium		6.4	0,10		mg/Kg	1	4/21/2008 9:26:55 AM		
Chromium		41	0.30		mg/Kg	1	4/21/2008 9:26:55 AM		
Lead		39	0.25		mg/Kg	1	4/28/2008 7:48:13 AM		
Selenium		ND	25		mg/Kg	10	4/21/2008 11:36:15 AM		
Silver		ND	0.25		mg/Kg	1	4/21/2008 9:26:55 AM		
FPA METHOD	8270C: SEMIVOLATILE	S					Analyst: JDC		
Acenaphthene		ND	30		mg/Kg	1	4/17/2008		
Acenaphthylene	,	ND	30		mg/Kg	1	4/17/2008		
Aniline		ND	30		mg/Kg	1	4/17/2008		
Anthracene		ND	30		m <b>g/Kg</b>	1	4/17/2008		
Azobenzene		ND	30		mg/Kg	1	4/17/2008		
Benz(a)anth/aci	ene	ND	30		mg/Kg	1	4/17/2008		
Benzo(a)pyrene	l	ND	30		mg/Kg	1	4/17/2008		
Benzo(b)fluoran	thene	ND	30		mg/Kg	1	4/17/2008		
Benzo(g,h,i)peŋ	ylene	ND	75		mg/Kg	1	4/17/2008		
Benzo(k)fluoran	thene	ND	30		mg/Kg	1	4/17/2008		
Benzolc acid		ND	50		mg/Kg	1	4/17/2008		
Benzyi alcohol		ND	30		mg/Kg	1	4/17/2008		
Bis(2-chloroethe		ND	30		mg/Kg ma#Ka	1	4/17/2008		
Bis(2-chloroeth)		ND	30		mg/Kg	1	4/17/2008		
Bis(2-chloroisor		ND	30		mg/Kg	1	4/17/2008		
Bis(2-ethylhexy		ND	75		mg/Kg mg/Kg	1	4/17/2008 4/17/2008		
4-Bromophenyl		ND	30		mg/Kg mg/Kg	1	4/17/2008		
Butyl benzyl phi	thalate	ND	30		mg/Kg	1	4/17/2008		
Carbazole		ND	30		mg/Kg mg/Kg	1	4/17/2008		
4-Chloro-3-meti	yiphanol	ND ND	75 75		mg/Kg mg/Kg	1 1	4/17/2008		

H Holding times for preparation or analysis exceeded

i.

MCL Maximum Contaminant Level

RL Reporting Limit

ND Not Detected at the Reporting Limit Spike recovery outside accepted recovery limits S

Analyte detected below quantitation limits

E Value above quantitation range

j

Date: 29-Apr-08

1

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	EP1-4	
Lab Order:	0804138	Collection Date:	4/9/2008 6:	00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	Date Received:		
Lab ID:	0804138-02	Matrix:	SOIL	
			DF	Date Analyzed

Analyses	Result	PQL	Qual U	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILE	S					Analyst: JD
2-Chloronaphthalene	ND	38	п	ng/Kg	1	4/17/2008
2-Chlorophenol	ND	30		ng/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30		ng/Kg	1	4/17/2008
Chrysene	ND	30		ng/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75		ng/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30		ng/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30		ng/Kg	1	4/17/2008
Dibenzofuran	ND	30		ng/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30		ng/Kg	1	4/17/2008
1.3-Dichlorobenzene	ND	30		ng/Kg	1	4/17/2008
1,4-Dichlorobanzene	ND	30		ng/Kg	1	4/17/2008
3.31-Dichlorobenzidine	ND	38		mg/Kg	1	4/17/2008
•	ND	30		mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30		m <b>g/Kg</b>	1	4/17/2008
Dimethyl phthalate 2.4-Dichlorophenol	ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/17/2008
	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75		mg/Kg	× 1	4/17/2008
2,6-Dinitrotoluene	ND	38		mg/Kg	1	4/17/2008
Fluoranthene	59	30		mg/Kg	1	4/17/2008
Fluorene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		mg/Kg	1	4/17/2008
Hexachloroethane	ND	38		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	75		mg/Kg	1	4/17/2008
Isophorone	180	38		mg/Kg	1	4/17/2008
2-Methylnaphthalene 2 Methylphagol	ND	75		mg/Kg	1	4/17/2008
2-Methylphenol 3+4-Methylphenol	86	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamina	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30		mg/Kg	t	4/17/2008
Naphthalene	ND	30		mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/17/2008
3-Nitroanillne	ND	30		mg/Kg	1	4/17/2008
4-Nitroanillne	ND	38		mg/Kg	1	4/17/2008
Nitrobenzene	ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30		mg/Kg	1	4/17/2008
Pentachlorophenol	ND	50		mg/Kg	1	4/17/2008
Phenanthrene	210	30		mg/Kg	1	4/17/2008

Qualifiers: \* Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

\_

1

CLIENT:	Western Refining South	west, Gallup						
Lab Order: 0804138 Project: Evaporation Pond/A				Coll	lection Date:	4/9/2008 6:00:00 PM		
		ion Lagoon		Da	te Received:	4/11/2008		
Lab ID:	0804138-02	•			Matrix:			
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed	
	270C: SEMIVOLATILES		· · · · · · · ·	<del>_</del>			Analyst: JDC	
Phenol		ND	30		mg/Kg	1	4/17/2008	
Pyrene		40	30		mg/Kg	1	4/17/2008	
Pyridine		ND	75		mg/Kg	1	4/17/2008	
1,2,4-Trichlorob	enzeñe	ND	30		mg/ <b>Kg</b>	1	4/17/200B	
2,4,5-Trichlorop		ND	30		mg/Kg	1	4/17/2008	
2,4,6-Trichlorop		ND	30		mg/Kg	1	4/17/2008	
	ibromaphenol	37.2	35.5-141		%REC	1	4/17/2008	
Surr: 2,4,6-11 Surr: 2-Fluore		72.3	30.4-128		%REC	1	4/17/2008	
	• •	92.1	28.1-129		%REC	1	4/17/2008	
Sum 2-Fluoro		41.5	34.6-151		%REC	1	4/17/2008	
Surr: 4-Terph		86.2	26.5-122		%REC	1	4/17/2008	
Surr: Nitrober Surr: Phenol-		74.8	37.6-118		%REC	1	4/17/2008	
Surr: Phenoi-	00	14:0	01.0 1.0					
	8260B: VOLATILES						Analyst: BDF	
	SZOUD, VOLANELO	NÐ	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Benzene		0.65	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Toluene		ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Ethylbenzene	albor (MTRE)	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Methyl tert-bulyl		1.3	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
1,2,4-Trimethylt		ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
1,3,5-Trimethylt		ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
1,2-Dichloroetha		ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
1,2-Dibromoeth	ane (EDB)	1.7	1,0		mg/Kg	10	4/19/2008 2:26:21 PM	
Naphthalene		6.0	2.0		mg/Kg	10	4/19/2008 2:26:21 PM	
1-Methyinaphth		7.6	2.0		mg/Kg	10	4/19/2008 2:26:21 PM	
2-Methylnaphth	alone	ND	7.5		mg/Kg	10	4/19/2008 2:26:21 PM	
Acetone		ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Bromobenzene		ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Bromodichloron	nethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Bromoform		ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM	
Bromomethane			5.0		mg/Kg	10	4/19/2008 2:26:21 PM	
2-Butanone	_	ND ND	5.0		mg/Kg	10	4/19/2008 2:26:21 PM	
Carbon disulfide		NO	1.0		mg/Kg	10	4/19/2008 2:26:21 PM	
Carbon tetrachi	oriae	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Chlorobenzene		ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM	
Chloroethane			0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
Chloroform		ND			mg/Kg mg/Kg	10	4/19/2008 2:26:21 PM	
Chloromethane		ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
2-Chlorotoluene		ND	0.50			10	4/19/2008 2:26:21 PM	
4-Chlorotoluene	3	ND	0.50		mg/Kg mg/Kg	10	4/19/2008 2:26:21 PM	
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM	
	propene	ND	0.50		mg/Kg	10	4/ 13/2000 2.20.21 TW	

Qualifiers: \* Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Date: 29-Apr-08

1

AA00			
CLIENT:	Western Refining Southwest, Gallup	Client Sample ID: EP1-4	
Lab Order:	0804138	Collection Date: 4/9/2008 6:0	0:00 PM
Project:	Evaporation Pond/Aeration Lagoon	Date Received: 4/11/2008	
Lab ID:	0804138-02	Matrix: SOIL	
	Result	POL Qual Units DF	Date Analyzed

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: BDI
PA METHOD 8260B: VOLATILES	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Dibromochloromethane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
Dibromomethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,3-Dichlorobanzena	ND	0.50		mg/Kg	10	4/19/2008 2:28:21 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
1,1-Dichloroethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
Hexachlorobutadiene	ND	5.0		mg/Kg	10	4/19/2008 2:26:21 PM
2-Hexanone	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
4-Isopropyitoluene		5.0		mg/Kg	10	4/19/2008 2:26:21 PM
4-Methyl-2-pentanone	ND ND	5.0 1.5		mg/Kg	10	4/19/2008 2:26:21 PM
Methylene chloride		0.50		mg/Kg	10	4/19/2008 2:26:21 PM
n-Bulylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
sec-Butylbenzene	NÐ			mg/Kg	10	4/19/2008 2:26:21 PM
Styrene	NĐ	0.50		+ +	10	4/19/2008 2:26:21 PM
tert-Bulylbenzone	ND	0.50		mg/Kg mg/Kg	10	4/19/2008 2:26:21 PM
1,1,1,2-Tetrachioroethane	ND	0.50			10	4/19/2008 2:26:21 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Tetrachloroothene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PN
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 2:26:21 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PN
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PN
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PN
1,2,3-Trichloropropane	ND	1.0		mg/Kg		4/19/2008 2:26:21 PN
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 2:26:21 PM
Xylenes, Total	1.2	1.0		mg/Kg	10	
Surr: 1,2-Dichloroethane-d4	96.7	68,7-122		%REC	10	4/19/2008 2:26:21 PN
Surr: 4-Bromofluorobenzene	83.3	79.3-126		%REC	10	4/19/2008 2:26:21 PN
Surr: Dibromofluoromethane	86.8	64.4-119		%REC	10	4/19/2008 2:26:21 PN
Surr: Toluene-d8	96.4	86.5-121		%REC	10	4/19/2008 2:26:21 PM

٠	Value exceeds Maximum Contaminant Level
L.	Value above questitation ratific

E Value above quantitation range
 J Analyte detected below quantitation limits

Qualifiers:

- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

-

1

CLIENT:	Western Refining Sou	thwest, Gallup			t Sample ID		45.00 0.4
Lab Order:	0804138					: 4/9/2008 5	:45:00 PM
Project:	Evaporation Pond/Aer	ration Lagoon		D	ate Received		
Lab ID:	0804138-03				Matrix	: SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
	8015B: DIESEL RANGE	ORGANICS					Analyst: SCC
Diesel Range O		120000	5000		mg/Kg	50	4/17/2008 12:33:47 AM
	Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 12:33:47 AM
Surr: DNOP		0	61.7-135	S	%REC	50	4/17/2008 12:33:47 AM
	8015B: GASOLINE RAN	GF					Analyst: NSB
	Organics (GRO)	ND	100		mg/Kg	20	4/18/2008 6:21:52 PM
Gasoline Range Surr: BFB		110	84-138		%REC	20	4/18/2008 6:21:52 PM
GUIL DE D			·				6. 1
EPA METHOD	7471: MERCURY						Analyst: SNV
Mercury		6.0	1.6		mg/Kg	50	4/18/2008 4:34:45 PM
	6010B: SOIL METALS						Analyst: NMC
Arsenic		23	2.5		mg/Kg	1	4/21/2008 9:29:36 AM
Barium		150	1.0		mg/Kg	10	4/21/2008 11:38:54 AM
Cadmium		0.97	0.10		mg/Kg	1	4/21/2008 9:29:36 AM
Chromium		23	0.30		mg/Kg	1	4/21/2008 9:29:36 AM
Lead		22	0.25		mg/Kg	1	4/28/2008 7:50:47 AM
Selenium		ND	25		mg/Kg	10	4/21/2008 11:38:54 AM
Silver		ND	0.25		mg/Kg	1	4/21/2008 9:29:36 AM
	8270C: SEMIVOLATILE	e					Analyst: JDC
••••	02/UC. SEWINOLATICE	ND	30		mg/Kg	1	4/17/2008
Acenaphthene	_	ND	30		mg/Kg	1	4/17/2008
Acenaphthylen	3	ND	30		mg/Kg	1	4/17/2008
Anilina		ND	30		mg/Kg	1	4/17/2008
Anthracene		ND	30		mg/Kg	1	4/17/2008
Azobenzene	<b>60</b> 0	ND	30		mg/Kg	1	4/17/2008
Benz(a)anthrac		ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene		ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluorar Benzo(c h i)per		ND	75		mg/Kg	1	4/17/2008
Benzo(g,h,i)per Benzo(k)fluorar		ND	30		mg/Kg	1	4/17/2008
Benzoic acid		ND	50		mg/Kg	1	4/17/2008
Benzyl alcohol		ND	30		mg/Kg	1	4/17/2008
Benzyr alconor Bis(2-chloroeth	owimethane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroeth		ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroiso		ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexy		ND	75		mg/Kg	1	4/17/2008
4-Bromopheny		ND	30		mg/Kg	1	4/17/2008
Butyl benzyl ph		ND	30		mg/Kg	1	4/17/2008
Carbazole		ND	30		mg/Kg	1	4/17/2008
	hvinhenol	ND	75		mg/Кg	1	4/17/2008
4-Chloro-3-met 4-Chloroaniline		ND	75		mg/Kg	1	4/17/2008

Value exceeds Maximum Contaminant Level ŧ Qualifiers:

Value above quantitation range Ε

Analyte detected below quantitation limits ì

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits S

Analyte detected in the associated Method Blank В

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

1

				<u> </u>
CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	EP1-5	
Lab Order:	0804138	Collection Date:	4/9/2008 5:	45:00 PM
Project:	<b>Evaporation Pond/Aeration Lagoon</b>	Date Received:	4/11/2008	
Lab ID:	0804138-03	Matrix:	SOIL	······································
	Desult	POL Qual Units	DF	Date Analyzed

nalyses	Result	PQL (	Jual Units	DF	Date Analyzed
PA METHOD 8270C: SEMIVOLATILES					Analyst: JD
	ND	38	mg/Kg	1	4/17/2008
2-Chloronaphthalene	ND	30	mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30	mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	57	30	mg/Kg	1	4/17/2008
Chrysene Di a bubl abbalain	ND	75	mg/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	30	mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30	mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30	mg/Kg	1	4/17/2008
Dibenzofuran	ND	30	mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30	mg/Kg	1	4/17/2008
1,3-Dichlorobenzene	ND	30	mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	38	mg/Kg	1	4/17/2008
3,3'-Dichiorobenzidine	ND	30	mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30	mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30	mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	45	mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	40 75	mg/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	75	mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75	mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75	mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	38	mg/Kg	1	4/17/2008
Fluoranthene	42	30	mg/Kg	1	4/17/2008
Fluorene	4z ND	30	mg/Kg	1	4/17/2008
Hexachlorobenzene			mg/Kg	1	4/17/2008
Hexachtorobutadiene	ND	30	mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30		1	4/17/2008
Hexachloroethane	NO	30	mg/Kg ⇔a/Ka	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38	mg/Kg	1	4/17/2008
Isophorone	ND	75	mg/Kg	1	4/17/2008
2-Methylnaphthalene	130	38	mg/Kg	1	4/17/2008
2-Methylphenol	ND	75	mg/Kg	1	4/17/2008
3+4-Methylphenol	140	30	mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30	mg/Kg mg/Kg	1	4/17/2008
N-Nitrosodlphenylamine	ND	30	mg/Kg ma/Kg	1	4/17/2008
Naphthalene	ND	30	mg/Kg mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30	mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30	mg/Kg ma∕Ka	1	4/17/2008
4-Nitroaniline	ND	38	mg/Kg ma/Ka	1	4/17/2008
Nitrobenzene	ND	75	mg/Kg	। न	4/17/2008
2-Nitrophenol	ND	30	mg/Kg	1	4/17/2008
4-Nitrophenol	ND	30	mg/Kg	 A	4/17/2008
Pentachlorophenol	ND	50	mg/Kg	1	
Phenanthrene	150	30	mg/Kg	1	4/17/2008

E Value above quantitation range

Analyte detected below quantitation limits J

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits S

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

- -

Client Sample ID: EP1-5 Western Refining Southwest, Gallup CLIENT: Collection Date: 4/9/2008 5:45:00 PM 0804138 Lab Order: Evaporation Pond/Aeration Lagoon Date Received: 4/11/2008 Project: Matrix: SOIL 0804138-03 Lab ID: PQL Qual Units **Date Analyzed** DF Result Analyses Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 4/17/2008 ND 30 mg/Kg 1 Phenol 30 mg/Kg 1 4/17/2008 48 Pyrane 4/17/2008 1 75 mg/Kg ND Pyridine 1 4/17/2008 30 mg/Kg ND 1,2,4-Trichlorobenzene 4/17/2008 1 ND 30 mg/Kg 2,4,5-Trichlorophenol 4/17/2008 1 30 mg/Kg ND 2,4,6-Trichlorophenol 4/17/2008 1 %REC 57.2 35.5-141 Surr: 2,4,6-Tribromophenol 4/17/2008 90.2 30.4-128 %REC 1 Surr: 2-Fluorobiphenyl 4/17/2008 28.1-129 %REC 1 108 Surr: 2-Fluorophenol 4/17/2008 56.5 34.6-151 %REC 1 Surr: 4-Terphenyl-d14 4/17/2008 103 26.5-122 %REC 1 Surr: Nitrobenzene-d5 4/17/2008 37.6-118 %REC 1 87.3 Surr: Phenol-d5 Analyst: BDH EPA METHOD 8260B: VOLATILES 4/19/2008 3:01:46 PM mg/Kg 10 ND 0.50 Benzene 4/19/2008 3:01:46 PM 0.50 10 0.69 mg/Kg Toluene 4/19/2008 3:01:46 PM 10 ND 0.50 mg/Kg Ethylbenzene 4/19/2008 3:01:46 PM 10 0.50 mg/Kg Methyl tert-butyl ether (MTBE) ND 4/19/2008 3:01:46 PM 10 0.50 mg/Kg 1.5 1,2,4-Trimethylbenzene 10 4/19/2008 3:01:46 PM 0.50 mg/Kg ND 1,3,5-Trimethylbenzene 10 4/19/2008 3:01:46 PM mg/Kg ND 0.50 1,2-Dichloroethane (EDC) 4/19/2008 3:01:46 PM 10 NO 0.50 mg/Kg 1,2-Dibromoethane (EDB) 4/19/2008 3:01:46 PM mg/Kg 10 1.9 1.0 Naphthalene 4/19/2008 3:01:46 PM 2.0 mg/Kg 10 7.1 1-Methylnaphthalene 2.0 mg/Kg 10 4/19/2008 3:01:46 PM 10 2-Methylnaphihalene 10 4/19/2008 3:01:46 PM ND 7.5 mg/Kg Acetone 4/19/2008 3:01:46 PM ND 0.50 mg/Kg 10 Bromobenzene 4/19/2008 3:01:46 PM 0.50 mg/Kg 10 Bromodichloromethane ND 4/19/2008 3:01:46 PM 10 0.50 mg/Kg ND Bromoform 10 4/19/2008 3:01:46 PM mg/Kg ND 1.0 Bromomethane 10 4/19/2008 3:01:46 PM ND 5.0 mg/Kg 2-Butanone 4/19/2008 3:01:46 PM mg/Kg 10 ND 5.0 Carbon disulfide 4/19/2008 3:01:46 PM 10 ND 1.0 mg/Kg Carbon tetrachloride 4/19/2008 3:01:46 PM 10 0.50 mg/Kg ND Chlorobenzene 4/19/2008 3:01:46 PM 10 1.0 mg/Kg ND Chloroethane 10 4/19/2008 3:01:46 PM ND 0.50 mg/Kg Chloroform 4/19/2008 3:01:46 PM 10 ND 0.50 mg/Kg Chloromethane 4/19/2008 3:01:46 PM 0.50 mg/Kg 10 ND 2-Chlorotoluene 4/19/2008 3:01:46 PM 10 0.50 mg/Kg NĎ 4-Chlorotoluene 4/19/2008 3:01:46 PM mg/Kg 10 0.50 ND cls-1,2-DCE 4/19/2008 3:01:46 PM 10 0.50 mg/Kg ND cis-1,3-Dichloropropene mg/Kg 10 4/19/2008 3:01:46 PM ND 1.0 1,2-Dibromo-3-chloropropane

Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

 Qualifiers:
 \*
 Value exceeds Maximum Contaminant Level

 E
 Value above quantitation range

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

1

# Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	EP1-5
Lab Order:	0804138	Collection Date:	4/9/2008 5:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	Date Received:	4/11/2008
Lab ID:	0804138-03	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					. <u>.</u>	Analyst: BDI
Dibromochloromethane	ND	0,50		mg/Kg	10	4/19/2008 3:01:46 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1.2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1-Dichloroethane	΄ ΝD	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 3:01:46 PM
Isopropylbenzene	NĎ	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
4-Isopropyitoluene	ND	0.50		m <b>g/Kg</b>	10	4/19/2008 3:01:46 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 3:01:46 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 3:01:46 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
n-Propylbenzene	ND	0.50		mg/K <b>g</b>	10	4/19/2008 3:01:46 PM
sec-Butylbanzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
tert-Butylbenzene	NĎ	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1,1,2-Tetrachloroethane	NÐ	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1,2,2-Tetrachtoroelhane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1.2.3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1,1-Trichloroethane	NÐ	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	4/19/2008 3:01:46 PM
1,2,3-Trichloropropane	ND	1.0		m <b>g/K</b> g	10	4/19/2008 3:01:46 PM
Viny  chloride	ND	0.50		m <b>g/K</b> g	10	4/19/2008 3:01:46 PM
Xylenes, Total	1.7	1.0		mg/Kg	10	4/19/2008 3:01:46 PM
Surr: 1,2-Dichloroethane-d4	98.2	68.7-122		%REĈ	10	4/19/2008 3:01:46 PM
Surr: 4-Bromofluorobenzene	90.9	79.3-126		%REC	10	4/19/2008 3:01:46 PM
Surr: Dibromofluoromethane	93.2	64.4-119		%REC	10	4/19/2008 3:01:46 PM
Surr: Toluene-d8	96.1	86.5-121		%REĈ	10	4/19/2008 3:01:46 PM

 Qualifiers:
 \*
 Value exceeds Maximum Contaminant Level

 E
 Value above quantitation range

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- II Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

• ~

٠

Date: 29-Apr-08

1

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	ALI-I-HP	
Lab Order:	0804138	Collection Date:	4/10/2008	3:25:00 PM
Project:	Evaporation Pond/Aeration Lagoon	Date Received:	4/11/2008	
Lab ID:	0804138-04	Matrix:	SOIL	

Analyses	Result	PQL	Qual U	nits	DF	Date Analyzed
PA METHOD 8270C: SEMIVOLATILE	S					Analyst: JDC
2-Chioronaphthalene	ND	7.5	m	g/Kg	1	4/17/2008
2-Chlorophenol	ND	6.0	m	g/Kg	1	4/17/2008
4-Chlorophenyl phanyl ather	ND	6.0	m	g/Kg	1	4/17/2008
Chrysene	ND	6.0	m	g/Kg	1	4/17/2008
Di-n-butyl phthalate	ND	15	m	g/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	6.0	m	g/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	6.0	m	g/Kg	1	4/17/200 <b>8</b>
Dipenzofuran	ND	6.0	m,	g/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	6.0	m	g/Kg	1	4/17/2008
1.3-Dichlorobenzene	ND	6.0	m	g/Kg	1	4/17/2008
1.4-Dichlorobenzene	ND	6.0	m	g/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	7.5	m	g/Kg	1	4/17/2008
Diethyl phthalate	ND	6.0	m	g/Kg	1	4/17/2008
Dimethyl phthalate	ND	6.0	m	g/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	6.0	m	g/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	9.0		g/Kg	1	4/17/2008
4,6-Dinitro-2-methylphenol	ND	15	m	g/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	15	m	g/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	15	m	g/Kg	1	4/17/2008
2.6-Dinitrotoluene	ND	15		g/Kg	1	4/17/2008
Fluoranthene	ND	7.5		g/ <b>Kg</b>	1	4/17/2008
Fluorene	ND	6.0		g/Kg	1	4/17/2008
Hexachlorobenzene	ND	6.0		g/Kg	1	4/17/2008
Hexachlorobutadiene	ND	6.0		g/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	6.0		g/Kg	1	4/17/2008
Hexachloroethane	ND	6.0		g/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	7.5		g/Kg	1	4/17/2008
Isopharone	ND	15		g/Kg	1	4/17/2008
2-Methylnaphthalene	23	7.6		g/Kg	1	4/17/2008
2-Methylphenol	ND	15		g/Kg	1	4/17/2008
3+4-Methylphenol	6.2	6.0		g/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	6.0		g/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	6.0		g/Kg	1	4/17/2008
Naphthalene	6.7	6.0		g/Kg	1	4/17/2008
2-Nitroaniline	ND	6.0		g/Kg	1	4/17/2008
3-Nitroaniline	ND	6.0		g/Kg	1	4/17/2008
4-Nitroaniline	ND	7.5		g/Kg	1	4/17/2008
Nitrobenzene	ND	15		g/Kg	1	4/17/2008
2-Nitrophenol	ND	6.0		g/Kg	1	4/17/2008
•	ND	6.0		g/Kg	1	4/17/2008
4-Nitrophenol Pentachlorophenol	ND	9.9		g/Kg	1	4/17/2008
Phenanthrene	8.4	6.0		g/Kg	1	4/17/2008

 Qualifiers:
 \*
 Value exceeds Maximum Contaminant Level

 E
 Value above quantilation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level

RL Reporting Limit

. ...

Hall Environmental Analysis Laboratory, Inc. Date: 29-Apr-08

i.

CLIENT:	Western Refining South	west, Gallup		•	it Sample ID:		
Lab Order:	0804138			Co	lection Date:	4/10/2008 3	3:25:00 PM
Project:	Evaporation Pond/Aera	tion Lagoon		Da	ate Received:		
Lab ID:	0804138-04				Matrix:	SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8270C: SEMIVOLATILES			<u> </u>			Analyst: JDC
Phenol		6.7	6.0		mg/Kg	1	4/17/2008
Pyrene		ND	6.0		mg/Kg	1	4/17/2008
Pyridine		ND	15		mg/Kg	t	4/17/2008
1,2,4-Trichlorob	enzene	ND	6.0		mg/Kg	1	4/17/2008
2,4,5-Trichlorop	bhenol	ND	6.0		mg/Kg	1	4/17/2008
2,4,6-Trichlorop	phenol	ND	6.0		mg/Kg	1	4/17/2008
Surr: 2,4,6-T	ribromophenol	74.0	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluor	obiphenyl	89.4	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluor	ophenol	95.4	28.1-129		%REC	1	4/17/2008
Surr: 4-Terph	nenyl-d14	53.7	34.6-151		%REC	1	4/17/2008
Surr: Nitrobe	nzene-d5	91.2	26.5-122		%REC	1	4/17/2008
Surr: Phenol-	-d5	79,0	37.6-118		%REC	1	4/17/2008
PA METHOD	8260B: VOLATILES						Anatyst: BDF
Benzene		1.2	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Toluene		6.8	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Ethylbenzene		2.9	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Methyl tert-buly	Lather (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2,4-Trimethyll		12	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,3,5-Trimethyil		3.3	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dichtoroeth		ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dibromoeth		ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Naphthalene		7.2	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1-Methylnaphth	alene	15	2.0		mg/Kg	10	4/19/2008 3:37:14 PM
2-Methylnaphth		22	2.0		mg/Kg	10	4/19/2008 3:37:14 PM
Acetone	810176	ND	7.5		mg/Kg	10	4/19/2008 3:37:14 PM
Bromobenzene		ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Bromodichtoron	nothana	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Bromoform	no(nano	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
		ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Bromomethane		ND	5.0		mg/Kg	10	4/19/2008 3:37:14 PM
2-Butanone		ND	5.0		mg/Kg	10	4/19/2008 3:37:14 PM
Carbon disulfide		ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Carbon tetrachi Chlorobenzene		ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
		ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Chloroethane		ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Chloroform		ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Chloromethane						10	4/19/2008 3:37:14 PM
2-Chlorotoluene		ND	0.50		mg/Kg		
4-Chlorotoluene	)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
cis-1,3-Dichloro		ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dibromo-3-0	chloropropane	ND	1.0		rng/Kg	10	4/19/2008 3:37:14 PM

Qualifiers: \*

.

1

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

....

Value exceeds Maximum Contaminant Level

Date: 29-Apr-08

ł.

CLIENT:	Western Refining Southwest, Gallup
Lab Order:	0804138
Project:	Evaporation Pond/Aeration Lagoon
Lab ID:	0804138-04

Client Sample ID: AL1-1-HP Collection Date: 4/10/2008 3:25:00 PM Date Received: 4/11/2008 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES		· · · · · · · · · · · · · · · · · · ·				Analyst: BDI
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 3:37:14 PM
isopropylbenzene	0.72	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
4-isopropyltoluene	0.54	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
4-Methyl-2-pentanone	ND	5.0		m <b>g</b> /Kg	10	4/19/2008 3:37:14 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 3:37:14 PM
n-Butylbenzene	2.7	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
n-Propylbenzene	1.7	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
sec-Butylbenzene	0.96	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
tert-Butylbenzene	ND	0,50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Trichlorofluoromethane	NĎ	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Vinyl chloride	ND	0.50		mg/Kg	10	4/19/2008 3:37:14 PM
Xylenes, Total	18	1.0		mg/Kg	10	4/19/2008 3:37:14 PM
Surr: 1,2-Dichloroethane-d4	99.0	68.7-122		%REC	10	4/19/2008 3:37:14 PM
Surr: 4-Bromofluorobenzene	91.2	79.3-126		%REC	10	4/19/2008 3:37:14 PM
Surr: Dibromofluoromethane	88.5	64.4-119		%REC	10	4/19/2008 3:37:14 PM
Surr: Toluene-d8	97.1	86.5-121		%rec	10	4/19/2008 3:37:14 PM

Qualifiers: \* Value exceeds Maximum Contantinant Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

....

Client Sample ID: AL1-2-HP Western Refining Southwest, Gallup CLIENT: Collection Date: 4/10/2008 4:22:00 PM 0804138 Lab Order: Date Received: 4/11/2008 Evaporation Pond/Aeration Lagoon Project: Matrix: SOIL Lab ID: 0804138-05 DF **Date Analyzed** POL Qual Units Result Analyses Analyst: SCC EPA METHOD 8015B: DIESEL RANGE ORGANICS 50 4/17/2008 1:41:58 AM mg/Kg 5000 Diesel Range Organics (DRO) 200000 4/17/2008 1:41:58 AM 50 25000 Motor Oll Range Organics (MRO) 37000 mg/Kg 4/17/2008 1:41:58 AM 61.7-135 s %REC 50 n Surr: DNOP Analyst: NSB EPA METHOD 8015B: GASOLINE RANGE 20 4/18/2008 7:22:04 PM 260 100 mg/Kg Gasoline Range Organics (GRO) 4/18/2008 7:22:04 PM %REC 20 84-138 109 Surr: BFB Analyst: SNV EPA METHOD 7471: MERCURY 4/18/2008 4:37:48 PM 50 5.0 1.6 mg/Kg Mercury Analyst: NMO EPA METHOD 6010B: SOIL METALS 4/21/2008 9:34:53 AM 2.5 mg/Kg 1 32 Arsenic 4/21/2008 11:44:13 AM 10 1.0 mg/Kg 350 Barium 4/21/2008 9:34:53 AM 0.10 mg/Kg 1 1.4 Cadmium 4/21/2008 11:44:13 AM 3.0 mg/Kg 10 51 Chromium 10 4/28/2008 8:38:04 AM 110 2.5 mg/Kg Lead 4/21/2008 11:44:13 AM 10 NÐ 25 mg/Kg Selenium 4/21/2008 9:34:53 AM 0.25 mg/Kg 1 ND Silver Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 4/17/2008 30 mg/Kg 1 ND Aconaphthene 4/17/2008 30 mg/Kg 1 Acenaphthylene ND 4/17/2008 ND 30 mg/Kg 1 Aniline ND 30 mg/Kg 1 4/17/2008 Anthracene 1 4/17/2008 ND 30 mg/Kg Azobenzene ND 30 mg/Kg 1 4/17/2008 Benz(a)anthracene 30 mg/Kg 1 4/17/2008 ND Benzo(a)pyrene 4/17/2008 30 mg/Kg 1 ND Benzo(b)fluoranthene 4/17/2008 75 mg/Kg 1 ND Benzo(g,h,i)perviene 4/17/2008 mg/Kg 1 ND 30 Benzo(k)fluoranthene 4/17/2008 50 mg/Kg 1 ND Benzoic acid 30 mg/Kg 1 4/17/2008 ND Benzyl alcohol 30 1 4/17/2008 ND mg/Kg Bis(2-chloroethoxy)methane 30 1 4/17/2008 ND mg/Kg Bis(2-chloroethyl)ether 4/17/2008 30 1 ND mg/Kg Bis(2-chloroisopropyl)ether 4/17/2008 ND 75 mg/Kg 1 Bis(2-ethylhexyl)phthalate 30 mg/Kg 1 4/17/2008 ND 4-Bromophenyl phenyl ether 1 4/17/2008 ND 30 mg/Kg Butyl benzyl phthalate 4/17/2008 ND 30 mg/Kg 1 Carbazole 4/17/2008 ND 75 mg/Kg 1 4-Chloro-3-methylphenol 75 mg/Kg 1 4/17/2008 ND 4-Chloroaniline

## Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

Qualifiers: \* Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Containinant Level
- RL Reporting Limit

. ..

Date: 29-Apr-08

\_...

1

## Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Western Refining Southwest, Gallup
Lab Order:	0804138
Project:	Evaporation Pond/Aeration Lagoon
Lab ID:	0804138-05

Client Sample ID: AL1-2-HP Collection Date: 4/10/2008 4:22:00 PM Date Received: 4/11/2008 Matrix: SOIL

\_\_\_\_\_

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
PA METHOD 8270C: SEMIVOLA	TILES		······································		Analyst: JD0
2-Chloronaphthalene	NÐ	38	mg/Kg	1	4/17/2008
2-Chlorophenol	ND	30	mg/Kg	1	4/17/2008
4-Chlorophenyl phenyl ether	ND	30	mg/Kg	1	4/17/2008
Chrysene	34	30	m <b>g</b> /Kg	1	4/17/2008
Di-n-butyl phthalate	ND	75	mg/Kg	1	4/17/2008
Di-n-octyl phthalate	ND	30	mg/Kg	1	4/17/2008
Dibenz(a,h)anthracene	ND	30	mg/Kg	1	4/17/2008
Dibenzofuran	ND	30	mg/Kg	1	4/17/2008
1,2-Dichlorobenzene	ND	30	mg/Kg	1	4/17/2008
1,3-Dichlarobenzene	ND	30	mg/Kg	1	4/17/2008
1,4-Dichlorobenzene	ND	30	mg/Kg	1	4/17/2008
3,3'-Dichlorobenzidine	ND	38	mg/Kg	1	4/17/2008
Diethyl phthalate	ND	30	mg/Kg	1	4/17/2008
Dimethyl phthalate	ND	30	mg/Kg	1	4/17/2008
2,4-Dichlorophenol	ND	30	mg/Kg	1	4/17/2008
2,4-Dimethylphenol	ND	45	mg/Kg	1	4/17/2008
4.6-Dinitro-2-methylphenol	ND	75	mg/Kg	1	4/17/2008
2,4-Dinitrophenol	ND	75	mg/Kg	1	4/17/2008
2,4-Dinitrotoluene	ND	75	mg/Kg	1	4/17/2008
2,6-Dinitrotoluene	ND	75	mg/Kg	1	4/17/2008
Fluoranthene	ND	38	mg/Kg	1	4/17/2008
Fluorene	40	30	mg/Kg	1	4/17/2008
Hexachlorobenzene	ND	30	mg/Kg	1	4/17/2008
Hexachlorobutadiene	NO	30	mg/Kg	1	4/17/2008
Hexachlorocyclopentadiene	ND	30	mg/Kg	1	4/17/2008
Hexachloroethane	ND	30	mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)pyrene	ND	38	mg/Kg	1	4/17/2008
Isophorone	ND	75	mg/Kg	1	4/17/2008
2-Methylaaphthalene	260	38	mg/Kg	1	4/17/2008
2-Methylphenol	ND	75	mg/Kg	1	4/17/2008
3+4-Methylphenol	96	30	mg/Kg	1	4/17/2008
N-Nitrosodi-n-propylamine	ND	30	mg/Kg	1	4/17/2008
N-Nitrosodiphenylamine	ND	30	mg/Kg	1	4/17/2008
Naphthalene	65	30	mg/Kg	1	4/17/2008
2-Nitroaniline	ND	30	mg/Kg	1	4/17/2008
3-Nitroaniline	ND	30	mg/Kg	1	4/17/2008
4-Nitroaniline	ND	38	mg/Kg	1	4/17/2008
Nitrobenzene	ND	75	mg/Kg	1	4/17/2008
	ND	30	mg/Kg	1	4/17/2008
2-Nitrophenol	ND	30	mg/Kg	1	4/17/2008
4-Nitrophenol Restachlomobenol	ND	50	mg/Kg	1	4/17/2008
Pentachlorophenol Phenanthrene	140	30	mg/Kg	1	4/17/2008

Qualifiers:

\* Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

1

CLIENT:	Western Refining Southw	est, Gallup			t Sample ID:		
Lab Order:	0804138			Col	lection Date:	4/10/2008 4	22:00 PM
Project:	Evaporation Pond/Aeratic	on Lagoon		Da	te Received :	4/11/2008	
Lab ID:	0804138-05	-			Matrix:		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
	3270C: SEMIVOLATILES						Analyst: JDC
Phenol	S2700. SEMAVOLATILES	54	30		mg/Kg	1	4/17/2008
		ND	30		mg/Kg	1	4/17/2008
Pyrene Pyridine		ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorobe	907809	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorop		ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichloropi		ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-Tri		46.5	35.5-141		%REC	1	4/17/2008
		88.0	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluoro	· ·	99.0	28.1-129		%REC	1	4/17/2008
Surr: 2-Fluoro	-	99.0 43.9	34.6-151		%REC	1	4/17/2008
Surr: 4-Terphe Surr: Nitrober		43.5 91.4	26.5-122		%REC	1	4/17/2008
		91.4 81.5	37.6-118		%REC	1	4/17/2008
Surr: Phenol-o	00	01.0	57.0-110		70110.4	•	
EPA METHOD 8	B260B: VOLATILES						Analyst: BDH
Benzene		2,4	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Toiuene		11	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Ethylbenzene		3.4	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Methyl tert-butyl	ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2,4-Trimethylb		10	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,3,5-Trimethylb		2.8	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2-Dichloroetha		NØ	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
1,2-Dibromoetha		ND	0.50		mg/Kg	10	4/19/2008 4:12:56 PM
Naphthalege	<b>、 ,</b>	6.5	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
1-Methylnaphtha	alene	14	2.0		mg/Kg	10	4/19/2008 4:12:55 PM
2-Methylnaphtha		20	2.0		mg/Kg	10	4/19/2008 4:12:55 PM
Acetone		ND	7.5		mg/Kg	10	4/19/2008 4:12:55 PM
Bromobenzene		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Bromodichlorom	ethane	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Bromoform		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Bromomethane		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
2-Butanone		ND	5.0		mg/Kg	10	4/19/2008 4:12:55 PM
Carbon disulfide		NÐ	5.0		mg/Kg	10	4/19/2008 4:12:55 PM
Carbon tetrachio		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
Chlorobenzene		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Chloroelhane		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM
Chloroform		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
Chloromethane		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
2-Chlorotoluane		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
4-Chlorotoluene		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
cis-1,2-DCE	5100000	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM
	hioropropane	ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

<sup>\*</sup> Value exceeds Maximum Contaminant Level

Date: 29-Apr-08

CLIENT:	Western Refining S	outhwest, Gallup			t Sample ID:			
Lab Order:	0804138			Col	lection Date:	4/10/2008 4	4:22:00 PM	
Project:	Evaporation Pond//	Veration Lagoon		Da	te Received:	4/11/2008		
Lab ID:	0804138-05				Matrix:	SOIL		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed	
	8260B: VOLATILES				· · · · · · · · · · · · · · · · · · ·	······	Analyst: BDI	
Dibromochloron		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
Dibromomethan		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM	
1.2-Dichloroben		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,3-Dichloroben		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,4-Dichloroben		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
Dichlorodifluoro		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,1-Dichloroeth		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM	
1.1-Dichloroeth		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,2-Dichloroproj		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,3-Dichloroproj		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
2,2-Dichloroproj		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM	
1,1-Dickloroproj		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM	
Hexachlorobuta		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM	
2-Hexanone	uisiid	ND	5.0		mg/Kg	10	4/19/2008 4:12:55 PM	
Isopropyibenzei	20	0.68	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
4-Isopropyltolue		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
4-Methyl-2-pent		ND	5.0		mg/Kg	10	4/19/2008 4:12:55 PM	
Methylene chlor		ND	1.5		mg/Kg	10	4/19/2008 4:12:55 PM	
n-Butylbenzene		2.1	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
n-Propylbanzen		1.5	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
sec-Butylbenze		0.80	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
Styrene	116	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
tert-Butylbenzer	74	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,1,1,2-Tetrachl		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,1,2,2-Tetrach		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
Tetrachloroethe		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
trans-1,2-DCE	100101000	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
trans-1,3-Dichlo 1,2,3-Trichlorob		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM	
		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,2,4-Trichlorob		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
1,1,1-Trichloros 1,1,2-Trichloros		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
Trichloroethene		ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
Trichlorofluoron	•	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
		ND	1.0		mg/Kg	10	4/19/2008 4:12:55 PM	
1,2,3-Trichlorop	inopano	ND	0.50		mg/Kg	10	4/19/2008 4:12:55 PM	
Vinyl chloride Xylonos, Total		20	1.0		mg/Kg	10	4/19/2008 4:12:55 PM	
Xylenes, Total	bloroolhono dd	94.9	68.7-122		%REC	10	4/19/2008 4:12:55 PM	
	hloroethane-d4	94.9 97.8	79.3-126		%REC	10	4/19/2008 4:12:55 PM	
	ofluorobenzene	82.5	64,4-119		%REC	10	4/19/2008 4:12:55 PM	
Surr: Diprom	ofluoromethane	82.5 97.1	86.5-121		%REC	10	4/19/2008 4:12:55 PM	

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Client Sample ID: AL1-3-HP Western Refining Southwest, Gallup CLIENT: Collection Date: 4/10/2008 2:45:00 PM 0804138 Lab Order: Date Received: 4/11/2008 **Project:** Evaporation Pond/Aeration Lagoon Matrix: SOIL 0804138-06 Lab ID: **PQL** Qual Units DF **Date Analyzed** Result Analyses Analyst: SCC EPA METHOD 8015B: DIESEL RANGE ORGANICS 50 4/17/2008 2:16:06 AM 5000 mg/Kg 110000 **Diesel Range Organics (DRO)** mg/Kg 50 4/17/2008 2:16:06 AM ND 25000 Motor Oil Range Organics (MRO) %REC 50 4/17/2008 2:16:06 AM 61.7-135 s Surr: DNOP 0 Analyst: NSB EPA METHOD 8015B: GASOLINE RANGE 20 4/18/2008 10:22:51 PM 100 mg/Kg Gasoline Range Organics (GRO) 150 4/18/2008 10:22:51 PM 84-138 %REC 20 108 Surr: BFB Analyst: SNV EPA METHOD 7471: MERCURY 50 4/18/2008 4:39:22 PM 6.7 1.6 mg/Kg Mercury Analyst: NMO EPA METHOD 6010B: SOIL METALS 2.5 1 4/21/2008 9:37:31 AM 11 mg/Kg Arsenic 10 4/21/2008 11:46:55 AM 1.0 mg/Kg 220 Barium 4/21/2008 9:37:31 AM 0.12 0.10 mg/Kg 1 Cadmium 4/21/2008 9:37:31 AM 0.30 mg/Kg 1 16 Chromium 4/28/2008 7:58:08 AM 22 0.25 mg/Kg 1 Lead 10 4/21/2008 11:46:55 AM ND 25 mg/Kg Selenium 4/21/2008 9:37:31 AM 1 ND 0.25 mg/Kg Silver Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 4/17/2008 30 mg/Kg 1 ND Acenaphthene 4/17/2008 30 mg/Kg 1 ND Acenaphthylene 4/17/2008 ND 30 mg/Kg 1 Aniline ND 30 mg/Kg 1 4/17/2008 Anthracene 30 1 4/17/2008 mg/Kg ND Azobenzene 30 mg/Kg 1 4/17/2008 ND Benz(a)anthracene 30 1 4/17/2008 ND mg/Kg Benzo(a)pyrene ND 30 mg/Kg 1 4/17/2008 Benzo(b)fluoranthene 4/17/2008 ND 75 mg/Kg 1 Benzo(g,h,i)perylene 4/17/2008 30 mg/Kg 1 ND Benzo(k)fluoranthene 4/17/2008 50 mg/Kg 1 Benzolc acid ND 4/17/2008 ND 30 mg/Kg 1 Benzyl alcohol 4/17/2008 NÐ 30 mg/Kg 1 Bis(2-chloroethoxy)methane Bis(2-chloroethyl)ether ND 30 mg/Kg 1 4/17/2008 ND 30 mg/Kg 1 4/17/2008 Bis(2-chloroisopropyl)ether 4/17/2008 Bis(2-ethylhexyl)phthalate ND 75 mg/Kg 1 4/17/2008 ND 30 mg/Kg 1 4-Bromophenyl phonyl ether 30 1 4/17/2008 ND mg/Kg Butyl benzyl phthalate 4/17/2008 ND 30 mg/Kg 1 Carbazole 4/17/2008 75 1 4-Chloro-3-methylphenol ND mg/Kg 4/17/2008 ND 75 mg/Kg 1 4-Chloroaniline Analyte detected in the associated Method Blank Value exceeds Maximum Contaminant Level в Qualifiers: \*

#### Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

- Analyte detected below quantitation limits J
- Not Detected at the Reporting Limit ND
- Spike recovery outside accepted recovery limits S
- Н Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- Reporting Limit RL.

\_ \_

CLIENT:	Western Refining So	outhwest, Gallup		Clier	t Sample	ID: AL1-3-AP	
Lab Order:	0804138	-		Co	llection Da	te: 4/10/2008	2:45:00 PM
Project:	Evaporation Pond/A	cration Lagoon				ed: 4/11/2008	
Lab ID:	0804138-06			v		ix: SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	3270C: SEMIVOLATILE	is				· · · · · · · · · ·	Analyst: JDC
2-Chloronaphtha	alene	ND	38		mg/Kg	1	4/17/2008
2-Chlorophenol		ND	30		mg/Kg	1	4/17/2008
4-Chlorophenyl	phenyl ether	ND	30		mg/Kg	1	4/17/2008
Chrysene		ND	30		mg/Kg	1	4/17/2008
Di-n-butyl phthal	ate	ND	75		mg/Kg	1	4/17/2008
Di-n-octyl phthal	ate	ND	30		mg/Kg	1	4/17/2008
Dibenz(a,h)anth	racene	ND	30		mg/Kg	1	4/17/2008
Dibenzofuran		ND	30		mg/Kg	1	4/17/2008
1,2-Olchloroben	zene	ND	30		mg/Kg	1	4/17/2008
1,3-Dichloroben	zene	ND	30		mg/Kg	1	4/17/2008
1,4-Dichloroben:	zene	ND	30		mg/Kg	1	4/17/2008
3.3 -Dichlorober		ND	38		mg/Kg	1	4/17/2008
Diethyl phthalate		ND	30		mg/Kg	1	4/17/2008
Dimethyl phthala		ND	30		mg/Kg	1	4/17/2008
2,4-Dichtoropher		ND	30		mg/Kg	1	4/17/2008
2,4-Dimethylphe		ND	45		mg/Kg	1	4/17/2008
4,6-Dinitro-2-me		ND	75		mg/Kg	1	4/17/2008
2,4-Dinitropheno	• •	ND	75		mg/Kg	1	4/17/2008
2,4-Dinitrotoluen		ND	75		mg/Kg	1	4/17/2008
2,6-Dinitrotoluen		ND	75		mg/Kg	1	4/17/2008
Fluoranthene	•	ND	38		mg/Kg	1	4/17/2008
Fluorene		40	30		mg/Kg	1	4/17/2008
Hexachlorobenzo	ene	ND	30		mg/Kg	1	4/17/2008
Hexachlorobutac		ND	30		mg/Kg	1	4/17/2008
Hexachlorocyclo		ND	30		mg/Kg	1	4/17/2008
Hexachioroethan		ND	30		mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)		ND	38		mg/Kg	1	4/17/2008
Isophorone	5110110	ND	75		mg/Kg	1	4/17/2008
2-Methylnaphtha	lene	200	38		mg/Kg	1	4/17/2008
2-Methylphenol		ND	75		mg/Kg	1	4/17/2008
3+4-Methylphend	Ń	ND	30		mg/Kg	1	4/17/2008
N-Nitrosodi-n-pro		ND	30		mg/Kg	1	4/17/2008
N-Nitrosodipheny		ND	30		mg/Kg	1	4/17/2008
Naphthalene		36	30		mg/Kg	1	4/17/2008
2-Nitroaniline		ND	30		mg/Kg	1	4/17/2008
3-Nitroaniline		ND	30		mg/Kg	1	4/17/2008
4-Nitroaniline		ND	38		mg/Kg	1	4/17/2008
Nilrobenzene		ND	75		mg/Kg	1	4/17/2008
2-Nitrophenol		ND	30		mg/Kg	1	4/17/2008
4-Nitrophenol		ND	30		mg/Kg	1	4/17/2008
Pentachtorophen	ol	ND	50		mg/Kg	f 1	4/17/2008
Phenanthrene	~,	100	30			1	
, nonanimone		100	50		mg/Kg	I	4/17/2008

Date: 29-Apr-08

l.

 Qualifiers:
 \*
 Value exceeds Maximum Contaminant Level

 E
 Value above quantitation range

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

÷ --

CLIENT:	Western Refining So	outhwest, Gallup			t Sample ID:		N. 45.00 D. 4
Lab Order:	0804138				ection Date:		2:45:00 PM
Project:	Evaporation Pond/A	Evaporation Pond/Aeration Lagoon			te Received:		
Lab ID:	0804138-06			Matrix:	SOIL		
Analyses		Result	PQL	Qual	Units	ÐF	Date Analyzed
PA METHOD	8270C: SEMIVOLATIL	ES					Analyst: JDC
Phenol		ND	30		mg/Kg	1	4/17/2008
Pyrene		ND	30		mg/Kg	1	4/17/2008
Pyridine		ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorob	enzene	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorop	henol	ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorop	henol	ND	30		mg/Kg	1	4/17/2008
Surr: 2,4,6-T	ribromophenol	54.6	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluor	obiphenyl	83.8	30.4-128		%REC	1	4/17/2008
Sur: 2-Fluor	ophenol	94.0	28.1-129		%REC	1	4/17/2008
Surr: 4-Terph	enyl-d14	36.5	34.6-151		%REC	1	4/17/2008
Surr: Nitrobe	nzene-d5	90.2	26.5-122		%REC	1	4/17/2008
Surr: Phenol-	d5	70.1	37.6-118		%REC	1	4/17/2008
EPA METHOD	8260B: VOLATILES						Analyst: BDI
Benzene		2.0	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Toluene		7.0	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Ethylbenzene		1.9	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Methyl tert-buty	l ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2,4-Trimethyli		8.3	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,3,5-Trimethyli	benzene	2.0	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2-Dichloroeth		ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1.2-Dibromoeth		ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Naphthalene		5.9	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
1-Methylnaphth	alene	15	2.0		mg/Kg	10	4/19/2008 4:48:49 PM
2-Methylnaphth	alene	20	2.0		mg/Kg	10	4/19/2008 4:48:49 PM
Acetone		ND	7.5		mg/Kg	10	4/19/2008 4:48:49 PM
Bromobenzene		NÐ	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Bromodichloror	nethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Bromoform		ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Bromomethane		ND	1.0		m <b>g</b> /Kg	10	4/19/2008 4:48:49 PM
2-Butanone		ND	5.0		mg/Kg	10	4/19/2008 4:48:49 PM
Carbon disulfid	Ð	ND	5.0		mg/Kg	10	4/19/2008 4:48:49 PM
Carbon tetrachi	oride	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Chlorobenzene		ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Chloroethane		ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Chloroform		ND	0.50		mĝ/Kg	10	4/19/2008 4:48:49 PM
Chloromethane		ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
2-Chlorotoluene	•	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
4-Chlorotoluene	9	ND	0.50		mġ/Kg	10	4/19/2008 4:48:49 PM
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
cis-1,3-Dichloro	propene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2-Dibromo-3-	chloropropane	NÐ	1.0		mg/Kg	10	4/19/2008 4:48:49 PM

Date: 29-Apr-08

Ì.

E Value above quantitation range

Analyte detected below quantitation limits J

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits \$

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

- -

Date: 29-Apr-08

l.

Hall Envi	ronmental Analysis Laboratory	<b>Date:</b> 29-Apr-08
CLIENT:	Western Refining Southwest, Gallup	Client Sample ID: AL1-3-HP
Lab Order:	0804138	Collection Date: 4/10/2008 2:45:00 PM
Project:	Evaporation Pond/Aeration Lagoon	Date Received: 4/11/2008
Lab ID:	0804138-06	Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES				•		Analyst: BDF
Dibromochloromethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Dibromomethane	ND	1.0		m <b>g/K</b> g	10	4/19/2008 4:48:49 PM
1.2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
1,1-Dichloroethene	ND	0.60		mg/Kg	10	4/19/2008 4:48:49 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
2,2-Dichloropropane	ND.	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Hexachlorobutadione	ND	1.0		m <b>g/K</b> g	10	4/19/2008 4:48:49 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 4:48:49 PM
Isopropylbenzene	0.51	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
4-jsopropyltoluene	0.53	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	4/19/2008 4:48:49 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 4:48:49 PM
n-Butylbenzene	2.1	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
n-Propylbenzene	1.2	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
sec-Bulylbenzene	0.89	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1.1.1.2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,1,2,2-Tetrachlorosthane	ND	0.50	1	mg/Kg	10	4/19/2008 4:48:49 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 4:48:49 PM
1,2,3-Trichlorobenzene	ND	1.0	1	mg/Kg	10	4/19/2008 4:48:49 PM
1,2,4-Trichlorobenzene	ND	0.50	1	mg/Kg	10	4/19/2008 4:48:49 PM
1,1,1-Trichlorosthane	ND	0.50	I	mg/Kg	10	4/19/2008 4:48:49 PM
1,1,2-Trichloroethane	ND	0.50	I	mg/Kg	10	4/19/2008 4:48:49 PM
Trichloroethene (TCE)	ND	0.50	1	mg/Kg	10	4/19/2008 4:48:49 PM
Trichlorofluoromethane	ND	0.50	I	mg/Kg	10	4/19/2008 4:48:49 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	4/19/2008 4:48:49 PM
Vinyl chloride	ND	0.50	I	mg/Kg	10	4/19/2008 4:48:49 PM
Xylenes, Total	12	1.0	I	mg/Kg	10	4/19/2008 4:48:49 PM
Surr: 1,2-Dichloroethane-d4	95.0	68.7-122	1	%REC	10	4/19/2008 4:48:49 PM
Surr: 4-Bromofluorobenzene	96.8	79.3-126	1	%REC	10	4/19/2008 4:48:49 PM
Surr: Dibromofluoromethane	80.9	64.4-119	1	%REC	10	4/19/2008 4:48:49 PM
Surr: Toluene-d8	102	86.5-121	+	%REC	10	4/19/2008 4:48:49 PM

\* Value exceeds Maximum Contaminant Level Qualifiers:

- E Value above quantitation range
- Analyte detected below quantitation limits J
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits \$
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

~-

Client Sample ID: AL1-4-HP Western Refining Southwest, Gallup CLIENT: Collection Date: 4/10/2008 10:50:00 AM Lab Order: 0804138 Date Received: 4/11/2008 Evaporation Pond/Acration Lagoon Project: Matrix: SOIL 0804138-07 Lab ID: PQL Qual Units DF **Date Analyzed** Result Analyses Analyst: SCC EPA METHOD 8015B: DIESEL RANGE ORGANICS 4/17/2008 2:50:07 AM 50 5000 mg/Kg 76000 Diesel Range Organics (DRO) mg/Kg 4/17/2008 2:50:07 AM 50 25000 ND Motor Oil Range Organics (MRO) 4/17/2008 2:50:07 AM %REC 50 61,7-135 S 0 Surr: DNOP Analyst: NSB EPA METHOD 8015B: GASOLINE RANGE 4/18/2008 10:52:49 PM 20 590 100 mg/Kg Gasoline Range Organics (GRO) 4/18/2008 10:52:49 PM 20 120 84-138 %REC Surr: BFB Analyst: SNV EPA METHOD 7471: MERCURY 4/18/2008 4:40:54 PM 50 mg/Kg 1.6 8,3 Mercury Analyst: NMO EPA METHOD 6010B: SOIL METALS 4/21/2008 9:40:07 AM 2.5 mg/Kg 1 47 Arsenic 10 4/21/2008 11:49:37 AM mg/Kg 1.0 310 Barium 4/21/2008 9:40:07 AM mg/Kg 1 0.10 1.4 Cadmium 4/21/2008 11:49:37 AM 10 mg/Kg 60 3.0 Chromium 4/28/2008 8:40:06 AM 10 mg/Kg 220 2.5Lead 4/21/2008 11:49:37 AM 10 mg/Kg ND 25 Selenium 4/21/2008 9:40:07 AM 1 ND 0.25mg/Kg Silver Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 4/17/2008 1 30 mg/Kg ND Acenaphthene 4/17/2008 mg/Kg 1 ND 30 Acenaphthylene 4/17/2008 1 30 mg/Kg ND Aniline 4/17/2008 ND 30 mg/Kg 1 Anthracene 4/17/2008 30 mg/Kg 1 ND Azobenzene mg/Kg 1 4/17/2008 30 ND Benz(a)anthracene mg/Kg 1 4/17/2008 30 ND Benzo(a)pyrene 1 4/17/2008 mg/Kg 30 ND Benzo(b)fluoranthene 4/17/2008 1 75 mg/Kg ND Benzo(g,h,i)perylene 4/17/2008 1 30 mg/Kg ND Benzo(k)fluoranthene 4/17/2008 1 mg/Kg ND 50 Benzoic acid 4/17/2008 1 30 mg/Kg ND Benzyl alcohol 4/17/2008 30 mg/Kg 1 ND Bis(2-chloroethoxy)methane 4/17/2008 mg/Kg 1 ND 30 Bis(2-chloroethyl)ether 4/17/2008 ND 30 mg/Kg 1 Bis(2-chloroisopropyl)ether 4/17/2008 mg/Kg 1 ND 75 Bis(2-ethylhexyl)phthalate 4/17/2008 mg/Kg 1 30 ND 4-Bromophenyl phenyl ether 1 4/17/2008 mg/Kg 30 ND Butyi benzyi phthalate 4/17/2008 1 30 mg/Kg ND Carbazole 4/17/2008 1 75 mg/Kg ND 4-Chloro-3-methylphenol 4/17/2008 1 ND 75 mg/Kg 4-Chloroaniline Analyte detected in the associated Method Blank в Value exceeds Maximum Contaminant Level **Oualifiers:** \* Holding times for preparation or analysis exceeded Value above quantitation range Η E MCL Maximum Contaminant Level Analyte detected below quantitation limits ĩ

## Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

Reporting Limit

RL

Spike recovery outside accepted recovery limits

Not Detected at the Reporting Limit

ND

s

----

Client Sample ID: AL1-4-HP Western Refining Southwest, Gallup CLIENT: Collection Date: 4/10/2008 10:50:00 AM 0804138 Lab Order: Evaporation Pond/Aeration Lagoon Date Received: 4/11/2008 **Project:** Matrix: SOIL 0804138-07 Lab ID: PQL Qual Units DF Date Analyzed Result Analyses Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES mg/Kg 1 4/17/2008 38 ND 2-Chloronaphthalene 4/17/2008 30 mg/Kg 1 ND 2-Chlorophenol 4/17/2008 30 mg/Kg 1 4-Chiorophenyl phenyl ether ND 4/17/2008 1 31 30 mg/Kg Chrysene 4/17/2008 ND 75 mg/Kg 1 Di-n-butyl phthalate 4/17/2008 ND 30 mg/Kg 1 Di-n-octyl phthalate ND 30 mg/Kg 1 4/17/2008 Dibenz(a,h)anthracene 30 1 4/17/2008 mg/Kg ND Dibenzofuran 4/17/2008 30 mg/Kg 1 ND 1,2-Dichlorobenzene 4/17/2008 1 30 mg/Kg 1,3-Dichlorobenzene ND 4/17/2008 1 30 mg/Kg ND 1,4-Dichlorobenzene 4/17/2008 38 mg/Kg 1 ND 3.3'-Dichlorobenzidine 4/17/2008 ND 30 mg/Kg 1 Diethyl phthalate 30 mg/Kg 1 4/17/2008 ND Dimethyl phthalate 1 4/17/2008 ND 30 mg/Kg 2,4-Dichlorophenol 4/17/2008 45 mg/Kg 1 ND 2.4-Dimethylphenol 4/17/2008 1 75 4,6-Dinitro-2-methylphenol ND mg/Kg 4/17/2008 75 1 ND mg/Kg 2,4-Dinitrophenol 4/17/2008 75 mg/Kg 1 2.4-Dinitrotoluene ND 4/17/2008 ND 75 mg/Kg 1 2,6-Dinitrotoluene 4/17/2008 38 mg/Kg 1 ND Fluoranthene 30 mg/Kg 1 4/17/2008 ND Fluorene 30 1 4/17/2008 mg/Kg ND Hexachlorobenzene 4/17/2008 1 30 mg/Kg ND Hexachlorobutadiene 4/17/2008 30 mg/Kg 1 Hexachlorocyclopentadiene ND 4/17/2008 1 ND 30 mg/Kg Hexachloroethane 4/17/2008 ND 38 mg/Kg 1 Indeno(1,2,3-cd)pyrene 4/17/2008 ND 75 mg/Kg 1 Isophorone 4/17/2008 340 38 mg/Kg 1 2-Methylnaphthalene NÐ 75 mg/Kg 1 4/17/2008 2-Methylphonol 4/17/2008 30 mg/Kg 1 ND 3+4-Methylphenol 30 mg/Kg 1 4/17/2008 ND N-Nitrosodi-n-propylamine 30 mg/Kg 1 4/17/2008 ND N-Nitrosodiphenylamine 1 4/17/2008 90 30 mg/Kg Naphthalene 1 4/17/2008 ND 30 mg/Kg 2-Nitroaniline 4/17/2008 1 30 mg/Kg 3-Nitroaniline ND 4/17/2008 38 mg/Kg 1 ND 4-Nitroaniline 75 mg/Kg 1 4/17/2008 ND Nitrobenzene 4/17/2008 ND 30 mg/Kg 1 2-Nitrophenol 4/17/2008 30 mg/Kg 1 ND 4-Nitrophenol 4/17/2008 ND 50 mg/Kg 1 Pentachiorophenol 4/17/2008 30 mg/Kg 1 84 Phenanthrene Analyte detected in the associated Method Blank В Value exceeds Maximum Contaminant Level ŧ Qualifiers: Holding times for preparation or analysis exceeded H Ε Value above quantitation range Maximum Contaminant Level Analyte detected below quantitation limits MCL. 1 Not Detected at the Reporting Limit RL Reporting Limit ND Page 26 of 128 Spike recovery outside accepted recovery limits S

## Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

00

CLIENT:	Western Refining South	west, Gallup		Clien	t Sample ID:	AL1-4-HP	
Lab Order:	0804138			Col	lection Date:	4/10/2008	10:50:00 AM
Project:	Evaporation Pond/Aerat	ion Lagoon		Da	ate Received:	4/11/2008	
Lab ID:	0804138-07	-			Matrix:		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8270C: SEMIVOLATILES						Analyst: JDC
Phenol		ND	30		mg/Kg	1	4/17/2008
Pyrene		ND	30		mg/Kg	1	4/17/2008
Pyridine		ND	75		mg/Kg	1	4/17/2008
1,2,4-Trichlorob	enzenë	ND	30		mg/Kg	1	4/17/2008
2,4,5-Trichlorop		ND	30		mg/Kg	1	4/17/2008
2,4,6-Trichlorop		ND	30		mg/Kg	1	4/17/2008
	ibromophenol	59.3	35.5-141		%REC	1	4/17/2008
Surr: 2-Fluoro		91.2	30.4-128		%REC	1	4/17/2008
Surr: 2-Fluoro	, ,	94.5	28.1-129		%REC	1	4/17/2008
Surr: 4-Terph		43.9	34.6-151		%REC	1	4/17/2008
Sur: 4-Terph Surr: Nitrober	•	88.0	26.5-122		%REC	1	4/17/2008
Sum: Natrober Sum: Phenot-		75.7	37.6-118		%REC	1	4/17/2008
QUIL FIGUUR		10.7	U.1-110				
EPA METHOD	3260B: VOLATILES						Analyst: BDI
Benzene		3.2	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Toluene		22	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Ethylbenzene		11	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Methyl tert-butyl	ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2,4-Trimethylb		37	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,3,5-Trimethylb		10	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2-Dichloroetha		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2-Dibromoetha		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Naphthalene	····· (···· ·· )	21	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1-Methyinaphtha	alene	29	2.0		mg/Kg	10	4/19/2008 5:24:28 PM
2-Melhylnaphtha		46	2.0		mg/Kg	10	4/19/2008 5:24:28 PM
Acetone		ND	7.5		mg/Kg	10	4/19/2008 5:24:28 PM
Bromobenzene		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Bromodichlorom	ethane	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Bromoform		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Bromomethane		ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
2-Butanone		ND	5.0		mg/Kg	10	4/19/2008 5:24:28 PM
Carbon disulfide	1	ND	5.0		mg/Kg	10	4/19/2008 5:24:28 PM
Carbon tetrachic		ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Chlorobenzene		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Chloroethane		ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Chloroform		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Chloromethane		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
2-Chlorotaluene		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
4-Chlorotoluene		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
cis-1,2-DOE	TODADA	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
	hloropropane	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM

Hall Environmenta	l Analysis	Laboratory,	Inc.
-------------------	------------	-------------	------

Date: 29-Apr-08

Ì

J Analyte detected below quantitation limits

- ND Not Detected at the Reporting Limit
- $\mathbf{S} = \mathbf{S} \mathbf{p} \mathbf{k} \mathbf{e}$  recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

~~

CLIENT:	Western Refining	Southwest, Gallup			•	D: AL1-4-HP	
Lab Order:	0804138			Co	llection Da	te: 4/10/2008	10:50:00 AM
Project:	Evaporation Pond/	Aeration Lagoon		Date Received: 4/11/2008			
Lab ID:	0804138-07	-			Matr	ix: SOIL	
Analyses		Result	PQL	Qual	Units	ĎF	Date Analyzed
	8260B: VOLATILES						Analyst: BDF
Dibromachioran		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Dibromomethar		ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1.2-Dichlorober		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,3-Dichlorober		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,4-Dichlorober		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Dichtorodifluoro		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1-Dichloroath		ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1,1-Dichloroeth		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2-Dichloropro		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,3-Dichloropro		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
2,2-Dichloropro	•	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1.1-Dichloropro	•	ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Hexachiorobuta		ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
2-Hexanone		ND	5.0		mg/Kg	10	4/19/2008 5:24:28 PM
Isopropyibenze	<b>AD</b>	1.6	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
4-isopropyloenze		0.84	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
4-Isopropyitolut 4-Methyl-2-pent		ND	5.0		mg/Kg	10	4/19/2008 5:24:28 PM
		ND	1.5		mg/Kg	10	4/19/2008 5:24:28 PM
Methylene chiol		7.0	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
n-Butylbenzene		5.9	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
n-Propylbenzen		1.8	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
sec-Butylbenze	ile.	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Styrene	<b>D</b> 2	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
tert-Butylbenze		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1,1,2-Tetrach		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1,2,2-Tetrach		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Tetrachloroethe	ne (POE)	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
trans-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
trans-1,3-Dichic		ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
1,2,3-Trichlorok		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2,4-Trichlorok		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,1,2-Trichloroe		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Trichloroethene		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Trichlorofluorof		ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
1,2,3-Trichlorop		ND	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
Vinyl chloride	Noberie	ND	0.50		mg/Kg	10	4/19/2008 5:24:28 PM
Xylenes, Total		60	1.0		mg/Kg	10	4/19/2008 5:24:28 PM
•	htoroethane-d4	101	68.7-122		%REC	10	4/19/2008 5:24:28 PM
	noroemane-04 lofiuorobenzene	96.3	79.3-126		%REC	10	4/19/2008 5:24:28 PM
•	oliuoromethane	85.6	64.4-119		%REC	10	4/19/2008 5:24:28 PM
Surr: Dibrom		93.8	86.5-121		%REC	10	4/19/2008 5:24:28 PM

Date: 29-Apr-08

l.

# Qualifiers: \* Value exceeds Maximum Contaminant Level E Value above quantitation range

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

--

CLIENT: Lab Order: Project: Lab ID:		Western Refining Sc 0804138 Evaporation Pond/A 0804138-08			Co.	llection Date Received	ID: AL1-5 ate: 4/10/2 /ed: 4/11/2 rix: SOIL	:008 10:20:00 AM	
Analyses			Result	PQL	Qual	Units	DI	F Date Analyz	æd
		15B: DIESEL RANG			• • •			Analys	t: SCC
Diesel Rang			130000	5000		mg/Kg	50		
-	_	rganics (MRO)	25000	25000		mg/Kg	50		56 AM
Sur: DNC	-	igames (mixe)	0	61.7-135	S	%REC	50		56 AM
ЕРА МЕТИС	טא כור	15B: GASOLINE RA	NGF					Analys	t: NSE
		rganics (GRO)	670	100		mg/Kg	20	-	
Surr: BFB		Iganica (CINO)	112	84-138		%REC	20		
	אד רונ							Analys	r snv
Mercury	ען 74	71: MERCURY	18	3.3		mg/Kg	100	•	
								Analys	t- 61847
	JD 60	10B: SOIL METALS	31	2.5		mg/Kg	1	4/21/2008 10:54	
Arsenic			450	1.0		mg/Kg	10	4/21/2008 11:52	
Barium			0.79	0.10		mg/Kg	10	4/21/2008 10:54	
Cadmium			46	0.30		mg/Kg	1	4/21/2008 10:54	
Chromium			40 110	2.5		mg/Kg	10	4/28/2008 8:44:	
Lead			ND	2.5		mg/Kg	10		
Selenium Silver			ND	0.25		mg/Kg	1	4/21/2008 10:54	
сох метис	ינא חו	70C: SEMIVOLATILE	:9					Analys	t: JDC
Acenaphthe			ND	30		mg/Kg	1	4/17/2008	
Acenaphthyl			ND	30		mg/Kg	1	4/17/2008	
Aniline	6110		ND	30		mg/Kg	1	4/17/2008	
Anthracene			ND	30		mg/Kg	1	4/17/2008	
Azobenzene			ND	30		mg/Kg	1	4/17/2008	
•			ND	30		mg/Kg	, 1	4/17/2008	
Benz(a)anth		r	ND	30		mg/Kg	1	4/17/2008	
Benzo(a)pyr Benzo(b)fluc		000	ND	30		mg/Kg	1	4/17/2008	
Benzo(g,h,i)			ND	75		mg/Kg	1	4/17/2008	
Benzo(g,n,i) Benzo(k)fluo			ND	. 30		mg/Kg	1	4/17/2008	
Benzolc acid			ND	50		mg/Kg	1	4/17/2008	
Benzyl alcoh			ND	30		mg/Kg	1	4/17/2008	
Bis(2-chloro		)methane	ND	30		mg/Kg	1	4/17/2008	
Bis(2-chloro			ND	30		mg/Kg	1	4/17/2008	
Bis(2-chloroi	* -		ND	30		mg/Kg	1	4/17/2008	
Bis(2-ethylhe	• •	• ·	ND	75		mg/Kg	1	4/17/2008	
4-Bromophe	-		ND	30		mg/Kg	1	4/17/2008	
Butyl benzyl	•	•	ND	30		mg/Kg	1	4/17/2008	
Carbazole			ND	30		mg/Kg	1	4/17/2008	
4-Chloro-3-n	nethvir	henol	ND	75		mg/Kg	1	4/17/2008	
4-Chloroanili			ND	75		mg/Kg	1	4/17/2008	
Qualifiers:	*	Value exceeds Maximum	Contaminant Level			•		he associated Method Bla	
	Е	Value above quantitation	range			H Holdin	g times for pre	paration or analysis exce	eded
	J	Analyte detected below c	uantitation limits		Μ	ICL Maxim	um Contamin	ant Level	
	ND	Not Detected at the Repo	orting Limit		1	RL Report	ing Limit	D	. 20 - 4
	S	Spike recovery outside a	ccepted recovery lim	its				Page	e 29 of

l.

Date: 29-Apr-08

#### Hall Environmental Analysis Laboratory. Inc.

CLIENT:	Western Refining South	west, Gallup		Client Sample II	D: AL1-5-H	<b>D</b>
Lab Order:	0804138			Collection Dat	e: 4/10/2008	10:20:00 AM
Project:	Evaporation Pond/Aera	tion Lagoon		Date Receive	d: 4/11/2008	<b>3</b> .
Lab ID:	0804138-08	÷			x: SOIL	
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
	270C: SEMIVOLATILES					Analyst: JD
2-Chloronaphtha		ND	38	mg/Kg	í	4/17/2008
2-Chiorophenol		ND	30	m <b>g/Kg</b>	1	4/17/2008
4-Chlorophenyl I	henvi ether	ND	30	mg/Kg	1	4/17/2008
Chrysene		ND	30	mg/Kg	1	4/17/2008
Di-n-butyl phthal	ate	ND	75	mg/Kg	1	4/17/2008
Di-n-octyl phthal		ND	30	mg/Kg	1	4/17/2008
Dibenz(a,h)anlhr		ND	30	mg/Kg	1	4/17/2008
Dibenzofuran	400110	ND	30	mg/Kg	1	4/17/2008
1,2-Dichlorobenz	70NÅ	ND	30	mg/Kg	1	4/17/2008
1,3-Dichlorobenz		ND	30	mg/Kg	1	4/17/2008
1,4-Dichlorobenz		NO	30	mg/Kg	1	4/17/2008
3,3'-Dichloroben		ND	38	mg/Kg	1	4/17/2008
		ND	30	mg/Kg	, 1	4/17/2008
Disthyl phthalate		ND	30	mg/Kg	1	4/17/2008
Dimethyl phthala		ND			1	4/17/2008
2,4-Dichloropher			30	mg/Kg	1	4/17/2008
2,4-Dimethylphe		ND	45	mg/Kg		
4,6-Dinitro-2-met		ND	75	mg/Kg	1	4/17/2008
2,4-Dinitropheno		ND	75	mg/Kg	1	4/17/2008
2,4-Dinitrotoluen	e	ND	75	mg/Kg	1	4/17/2008
2,8-Dinitrotoluen	e	ND	75	mg/Kg	1	4/17/2008
Fluoranthene		ND	38	mg/Kg	1	4/17/2008
Fluorene		47	30	mg/Kg	1	4/17/2008
Hexachlorobenze	ene	ND	30	mg/Kg	1	4/17/2008
Hexachlorobutac	liene	ND	30	mg/Kg	1	4/17/2008
Hexachlorocyclo	pentadiene	ND	30	mg/Kg	1	4/17/2008
Hexachloroethan	00	ND	30	mg/Kg	1	4/17/2008
Indeno(1,2,3-cd)	pyrene	ND	38	mg/Kg	1	4/17/2008
Isophorone		ND	75	mg/Kg	1	4/17/2008
2-Methylnaphtha	ane	460	38	mg/Kg	1	4/17/2008
2-Methylphenol		ND	75	mg/Kg	1	4/17/2008
3+4-Methylphend	bl	47	30	m <b>g</b> /Kg	1	4/17/2008
N-Nitrosodi-n-pro	opylamine	ND	30	mg/Kg	1	4/17/2008
N-Nitrosodipheny	lamine	ND	30	mg/Kg	1	4/17/2008
Naphthalene		110	30	mg/Kg	1	4/17/2008
2-Nitroaniline		ND	30	mg/Kg	1	4/17/2008
3-Nitroanilíne		ND	30	mg/Kg	1	4/17/2008
4-Nitroaniline		ND	38	mg/Kg	1	4/17/2008
Nitrobenzene		ND	75	mg/Kg	1	4/17/2008
2-Nitrophenol		ND	30	mg/Kg	1	4/17/2008
4-Nitrophenol		ND	30	mg/Kg	1	4/17/2008
Pentachlorophen	int	ND	50	mg/Kg	1	4/17/2008
- entecniorophen		130	30	mg/Kg	1	4/17/2008

Date: 29-Apr-08

l.

J Analyte detected below quantitation limits

- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- MCL Maximum Contaminant Level
- RL Reporting Limit

~ 4

CLIENT:	Western Refining Se	outhwest, Gallup		Client Sample ID:	AL1-5-HP	
Lab Order:	0804138			<b>Collection Date:</b>	4/10/2008	10:20:00 AM
Project:	Evaporation Pond/A	eration Lagoon		Date Received:	4/11/2008	
-	0804138-08			Matrix		
Lab ID:	0804138-08	······			· · · · · · · · · · · · · · · · · · ·	
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD	270C: SEMIVOLATIL				_	Analyst: JDC
Phenol		ND	30	mg/Kg	1	4/17/2008
Pyrene		ND	30	mg/Kg	1	4/17/2008
Pyridine		ND	75	mg/Kg	1	4/17/2008
1,2,4-Trichlorobe	enzene	ND	30	mg/Kg	1	4/17/2008
2,4,5-Trichloroph	nenol	ND	30	mg/Kg	1	4/17/2008
2,4,6-Trichloroph	renol	ND	30	mg/Kg	1	4/17/2008
Sur: 2,4,6-Tri	bromophenol	41.4	35.5-141	%REC	1	4/17/2008
Surr: 2-Fluoro	biphenyl	74.1	30.4-128	%REC	1	4/17/2008
Surr: 2-Fluoro	phenoi	94.2	28.1-129	%REC	1	4/17/2008
Surr: 4-Terphe	enyl-d14	46.3	34.6-151	%REC	1	4/17/2008
Surr: Nitroben	zene-d5	99.8	26.5-122	%REC	1	4/17/2008
Surr: Phenol-c	35	74.0	37.6-118	%REC	1	4/17/2008
	260B: VOLATILES					Analyst: BDI
Benzene		9.0	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
Toluene		48	1.0	mg/Kg	20	4/21/2008 12:37:00 PM
Ethylbenzene		15	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
Methyl tert-butyl	ether (MTBE)	0.74	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
1,2,4-Trimethylb		26	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
1,3,5-Trimethylb		7.4	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
1,2-Dichloroetha		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
1,2-Dibromoetha		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
Naphthalene		19	1.0	mg/Kg	10	4/19/2008 6:00:00 PM
1-Methylnaphtha	lene	28	2.0	mg/Kg	10	4/19/2008 6:00:00 PM
2-Methylnaphtha		42	2.0	mg/Kg	10	4/19/2008 6:00:00 PM
• -	1010	ND	7.5	mg/Kg	10	4/19/2008 6:00:00 PM
Acetone		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
Bromobenzene	othané	ND	0.50	mg/Kg	. 10	4/19/2008 6:00:00 PM
Bromodichlorom Bromoform	ourano	ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
Bromonorm		ND	1.0	mg/Kg	10	4/19/2008 6:00:00 PM
2-Butanone		ND	5.0	mg/Kg	10	4/19/2008 6:00:00 PM
Z-Butanone Carbon disulfide		ND	5.0	mg/Kg	10	4/19/2008 6:00:00 PM
Carbon tetrachio	ride	ND	1.0	mg/Kg	10	4/19/2008 6:00:00 PM
Chlorobenzene		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
Chlorosthane		ND	1.0	mg/Kg	10	4/19/2008 6:00:00 PM
Chloroform		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
Chloromethane		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
2-Chlorotoluene		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
4-Chlorotoluene		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
		ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM.
cis-1,2-DCE cls-1,3-Dichlorop	ronono	ND	0.50	mg/Kg	10	4/19/2008 6:00:00 PM
- GS- C3-DEEDCFOL	nobelle	ND	1.0	mg/Kg	10	4/19/2008 6:00:00 PM

#### montal Analysis Laboratory Inc ... **NET**

Value above quantitation range Ŀ

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits S

Ì.

MCI. Maximum Contaminant Level

RL Reporting Limit

<u>~</u>~

Date: 29-Apr-08

1

Lab Order:0804138Collection Date: 4/10/2008 10:20:00 AMProject:Evaporation Pond/Aeration LagoonDate Received: 4/11/2008Matrix:SOIL	CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	AL1-5-HP	
Matrix: SOIL	-	-	<b>Collection Date:</b>	4/10/2008	10:20:00 AM
Lab ID: 0804138-08 Matrix: SOIL	Project:	Evaporation Pond/Aeration Lagoon	Date Received:	4/11/2008	
	Lab ID:	0804138-08	Matrix:	SOIL	

Analyses	Result	PQL	Qual U	nits	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochioromethane	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
Dibromomethane	ND	1.0	m	g/Kg	10	4/19/2008 8:00:00 PM
1.2-Dichtorobenzene	NØ	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1,3-Dichlorobenzene	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1.4-Dichlorobenzene	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
Dichlorodifluoromethane	ND	0.50	m,	g/Kg	10	4/19/2008 6:00:00 PM
1,1-Dichloroethane	ND	1.0	m	g/Kg	10	4/19/2008 6:00:00 PM
1,1-Dichloroethene	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1,2-Dichloropropane	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1,3-Dichloropropane	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
2.2-Dichloropropane	ND	1.0	m	g/Kg	10	4/19/2008 6:00:00 PM
1,1-Dichloropropene	ND	1.0	m	g/Kg	10	4/19/2008 6:00:00 PM
Hexachlorobutadiene	ND	1.0	m	g/Kg	10	4/19/2008 6:00:00 PM
2-Hexanone	ND	5.0	m	g/Kg	10	4/19/2008 6:00:00 PM
Isopropylbenzene	2.6	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
4-Isopropyttoluene	0.90	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
4-Methyl-2-pentanone	ND	5.0	m	g/Kg	10	4/19/2008 6:00:00 PM
Methylene chloride	ND	1.5	m	g/Kg	10	4/19/2008 6:00:00 PM
n-Bulylbenzene	4.9	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
n-Propylbenzene	4.8	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
sec-Butylbenzene	1.9	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
Styrene	ND	Ö.50	m	g/Kg	10	4/19/2008 6:00:00 PM
tert-Butylbenzene	ND	0.50	m	g/Kg	10	4/19/2008 5:00:00 PM
1,1,1,2-Tetrachloroethane	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1,1,2,2-Tetrachloroethane	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
Tetrachloroethene (PCE)	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
trans-1,2-DCE	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
trans-1,3-Dichloropropene	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1,2,3-Trichlorobenzene	ND	1.0	m	g/Kg	10	4/19/2008 6:00:00 PM
1,2,4-Trichlorobenzene	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1,1,1-Trichloroethane	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1,1,2-Trichloroethane	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
Trichloroethene (TCE)	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
Trichlorofluoromethane	ND	0.50	m	g/Kg	10	4/19/2008 6:00:00 PM
1,2,3-Trichloropropane	ND	1.0	m	ig/Kg	10	4/19/2008 6:00:00 PM
Vinyl chloride	ND	0.50	m	ig/Kg	10	4/19/2008 6:00:00 PM
Xylenes, Totał	81	1.0	m	<b>ig</b> /Kg	10	4/19/2008 6:00:00 PM
Surr: 1,2-Dichloroethane-d4	97.9	68.7-122	%	REC	10	4/19/2008 6:00:00 PM
Surr: 4-Bromofluorobenzene	101	79.3-126	%	REC	20	4/21/2008 12:37:00 PM
Surr: Dibromofluoromethane	88.2	64.4-119	%	REC	10	4/19/2008 6:00:00 PM
Surr: Toluene-d8	100	86.5-121	%	REC	10	4/19/2008 6:00:00 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level
	Е	Value above quantitation range
	J	Analyte detected below quantitation limits

- J Analyte detected below quantitation limits ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

~~

CLIENT:	Western Refining Sou	thwest, Gallup		Clier	nt Sample ID:	AL1-1-SS	
Lab Order:	0804138	*		Co	lection Date:	4/10/2008 :	5:10:00 PM
Project:	Evaporation Pond/Ae	ration Lagoon			ate Received:		
Lab ID:	0804138-09	unon Dugoon		D	Matrix:		
Analyses		Result	POL	Qual	Units	DF	Date Analyzed
	015B: DIESEL RANGE						Analyst: SCC
		71000	5000		mg/Kg	50	4/17/2008 3:57:41 AM
Diesel Range Or	-	71000 ND	25000		mg/Kg	50	4/17/2008 3:57:41 AM
Motor Oil Range	Organics (MRO)		61.7-135	s	%REC	50 50	4/17/2008 3:57:41 AM
Surr: DNOP		0	01.7-130	\$	70NEU	50	4/11/2000 3:31:41 / Mil
PA METHOD 8	015B: GASOLINE RAN	GE					Analyst: NSE
Gasoline Range		300	250		m <b>g/K</b> g	50	4/17/2008 2:36:15 PM
Surr: BFB		109	84-138		%REC	50	4/17/2008 2:36:15 PM
							Analust: CM
	471: MERCURY					100	Analyst: SNV
Mercury		19	3.3		mg/Kg	100	4/18/2008 4:44:01 PM
	010B: SOIL METALS						Analyst: NM0
Arsenic	9 1 8 BP 1 9 9 19 19 19 19 19 19 19 19 19 19 19	29	2.5		mg/Kg	1	4/21/2008 10:57:35 AN
Barium		140	1.0		mg/Kg	10	4/21/2008 11:55:01 AM
Cadmium		0.64	0.10		mg/Kg	1	4/21/2008 10:57:35 AN
Chromium		44	0.30		mg/Kg	1	4/21/2008 10:57:35 AM
Lead		23	0.25		mg/Kg	1	4/28/2008 B:14:15 AM
Selenium		ND	25		mg/Kg	10	4/21/2008 11:55:01 AM
Sliver		ND	0.25		mg/Kg	1	4/21/2008 10:57:35 AM
		•					Analyst: JDC
EPA METHOD 8 Acenaphthene	270C: SEMIVOLATILE:	) ND	30		mg/Kg	1	4/17/2008
Acenaphthylene		ND	30		mg/Kg	1	4/17/2008
Aniline		ND	30		mg/Kg	1	4/17/2008
		ND	30		mg/Kg	1	4/17/2008
Anthracene		ND	30		mg/Kg	1	4/17/2008
Azobenzene		ND	30		mg/Kg	1	4/17/2008
Benz(a)anthrace	ite.	ND	30		mg/Kg	1	4/17/2008
Benzo(a)pyrene		ND	30		mg/Kg	1	4/17/2008
Benzo(b)fluorant Benzo(g,h,i)peryl		ND	75		mg/Kg	1	4/17/2008
Benzo(g,n,i)pery		ND	30		mg/Kg	1	4/17/2008
Benzoic acid	iena	ND	50		mg/Kg	1	4/17/2008
Benzył alcohol		ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroetho:	(v)methane	ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroethy)		ND	30		mg/Kg	1	4/17/2008
Bis(2-chloroisopr		ND	30		mg/Kg	1	4/17/2008
Bis(2-ethylhexyl)		ND	75		mg/Kg	1	4/17/2008
4-Bromophenyl p		ND	30		mg/Kg	1	4/17/2008
Butyl benzyl phth	•	ND	30		mg/Kg	1	4/17/2008
Carbazole		ND	30		mg/Kg	1	4/17/2008
4-Chloro-3-methy	Internal	ND	75		mg/Kg	1	4/17/2008
4-Chloroaniline	option	ND	75		mg/Kg	1	4/17/2008
	Value encode Moviement					eted in the acco	ciated Method Blank
Qualiflers: * E	Value exceeds Maximum Value above quantitation						on or analysis exceeded
L J	Analyte detected below qu	•			•	Contaminant Le	-
J							
NE	Not Detected at the Report	ting Limit			RL Reporting L	10116	Page 33 of

Date: 29-Apr-08

0004129				t Sample ID:		
0804138			Col	lection Date:	; 4/10/2008	5:10:00 PM
Evaporation Pond/Aera	ation Lagoon		Da	te Received:	4/11/2008	}
0804138-09	0					
- <u> </u>	Result	PQL	Qual	Units	DF	Date Analyzed
270C: SEMIVOLATILES						Analyst: JDC
		38		mg/Kg	1	4/17/2008
		30			1	4/17/2008
henvl ether					1	4/17/2008
hony and					1	4/17/2008
ate					1	4/17/2008
					1	4/17/2008
					1	4/17/2008
					1	4/17/2008
ene					1	4/17/2008
					1	4/17/2008
						4/17/2008
						4/17/2008
				-		4/17/2008
						4/17/2008
						4/17/2008
						4/17/2008
						4/17/2008
						4/17/2008
				-		4/17/2008
						4/17/2008
e						4/17/2008
						4/17/2008
				•		4/17/2008
						4/17/2008 4/17/2008
				-		
						4/17/2008
8						4/17/2008
pyrene						4/17/2008
						4/17/2008
lene						4/17/2008
						4/17/2008
						4/17/2008
						4/17/2008
/lamine						4/17/2008
						4/17/2008
						4/17/2008
						4/17/2008
				* *		4/17/2008
						4/17/2008
	ND					4/17/2008
						4/17/2008
ol						4/17/2008
	50	30		mg/Kg	1	4/17/2008
Value exceeds Maximum C	toataminant Level			B Analyte de	lected in the as	sociated Method Blank
				•		
•	-			-	• •	
	2770C: SEMIVOLATILES lane phenyl ether ate ate ate ate ate ate ate cacene zene zene zene zidine inte nol inte nol intylphenol it ylphenol i e e e e e e e e e e e e e e e ane tidine i e e e e e e e e e e e e e e e e e	Result         s2770C: SEMIVOLATILES         lane       ND         ohenyl ether       ND         ate       ND         scene       ND         sce<	ResultPQL270C: SEMIVOLATILESIleneND30obenyl etherND30ateND75ateND30ateND30ateND30ateND30ateND30ateND30ateND30ateND30ateND30ateND30ateND30ateND30ceneND30ceneND30ateND30ateND30ateND30ateND30ateND30ateND75ateND75ateND30ate<	Result         PQL         Qual           1270C: SEMIVOLATILES         ND         36           Iane         ND         30           phenyl ether         ND         30           ate         ND         30           racene         ND         30           rene         ND         75           e         ND         75           e         ND         75           e         ND         30           poto         75         9           poto         ND         30	Result         PQL         Qual         Units           1270C: SEMIVOLATILES         ND         38         mg/Kg           lene         ND         30         mg/Kg           phenyl ethar         ND         30         mg/Kg           ate         ND         30         mg/Kg           ate         ND         30         mg/Kg           gacane         ND         30         mg/Kg           scane         ND         75         mg/Kg           scane         ND         75         mg/Kg           scane<	Result         PQL         Qual         Units         DF           2270C: SEMIVOLATILES         38         mg/Kg         1           henyl ether         ND         30         mg/Kg         1           henyl ether         ND         30         mg/Kg         1           ate         ND         30         mg/Kg         1           acene         ND         30         mg/Kg         1           cene         ND         30         mg/Kg         1           tene         ND         75         mg/Kg         1           tene         ND         7

Date: 29-Apr-08

RL Reporting Limit

0r

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Sc	outhwest, Gailup			Sample ID:		< 10.00 D3.4
Lab Order:	0804138				ction Date:		5:10:00 PM
Project:	Evaporation Pond/A	ond/Aeration Lagoon		Date	e Received:		
Lab ID:	0804138-09				Matrix:	SOIL	
Analyses		Result	PQL	Qual L	Jnits	DF	Date Analyzed
EPA METHOD	270C: SEMIVOLATIL	ES					Analyst: JDC
Phenol		. 34	30	m	ng/Kg	1	4/17/2008
Pyrene		ND	30		ng/Kg	1	4/17/2008
Pyridine		ND	75		ng/Kg	1	4/17/2008
1,2,4-Trichlorob	enzene	ND	30		ng/Kg	1	4/17/2008
2,4,5-Trichloropi	henol	ND	30	π	ng/Kg	1	4/17/2008
2,4,6-Trichloroph	henol	ND	30	ń	ng/Kg	1	4/17/2008
Surr: 2,4,6-Tr	ibromophenol	70.3	35.5-141	9	GREC	1	4/17/2008
Surr: 2-Fluoro		98.8	30.4-128	%	6REC	1	4/17/2008
Surr: 2-Fluoro		95.0	28.1-129	%	6REC	1	4/17/2008
Surr: 4-Terph		58.3	34.6-151	%	6REC	1	4/17/2008
Surr: Nitrober		84.8	26.5-122	%	6REC	1	4/17/2008
Surr: Phenol-		72.8	37.6-118	%	6REC	1	4/17/2008
	3260B: VOLATILES						Analyst: BDI
Benzene		3.6	0.50	n	ng/Kg	10	4/19/2008 6:35:13 PM
Toluene		17	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
Ethylbenzene		4.3	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
Methyl tert-butyl	ether (MTBE)	ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
t,2,4-Trimethylb		11	0,50		ng/Kg	10	4/19/2008 6:35:13 PM
1,3,5-Trimethylb		2.7	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
1,2-Dichloroetha		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
1,2-Dibromoetha		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
	ano (	10	1.0		ng/Kg	10	4/19/2008 6:35:13 PM
Naphthalene	lana	13	2.0		ng/Kg	10	4/19/2008 6:35:13 PM
1-Methylnaphtha		21	2.0		ng/Kg	10	4/19/2008 6:35:13 PM
2-Methylnaphtha		ND	7.5		ng/Kg	10	4/19/2008 6:35:13 PM
Acetone		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
Bromobenzene Bromodichiorom	othane	ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
Bromodichioron		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
Bromoiorm		ND	1.0		ng/Kg	10	4/19/2008 6:35:13 PM
2-Butanone		ND	5.0		ng/Kg	10	4/19/2008 6:35:13 PM
Z-Butanone Carbon disulfide		ND	5.0		ng/Kg	10	4/19/2008 6:35:13 PM
Carbon tetrachic		ND	1.0		ng/Kg	10	4/19/2008 6:35:13 PM
Chlorobenzene	//MV	ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
Chloroethane		ND	1.0		ng/Kg	10	4/19/2008 6:35:13 PM
Chloroform		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
Chloromethane		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
2-Chiorotoluene		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
4-Chlorotoluene		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
cls-1,2-0CE		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
cis-1,2-00E cis-1,3-Dichloro)		ND	0.50		ng/Kg	10	4/19/2008 6:35:13 PM
ຸມສະຖຸມະບາດແຫ່ນ	hloropropane	ND	1.0		ng/Kg	10	4/19/2008 6:35:13 PM

Date: 29-Apr-08

l.

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

 $\mathbf{S} = \mathbf{S} \mathbf{p} \mathbf{i} \mathbf{k} \mathbf{c}$  recovery outside accepted recovery limits

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

 $\sim \sim$ 

Date: 29-Apr-08

j.

CLIENT: Western Refining Southwest, Gallur			Client Sample ID: AL1-1-SS Collection Date: 4/10/2008 5:10:00 PM					
Lab Order:	0804138			Coll	ection Date:	4/10/2008 !	5:10:00 PM	
Project:	Evaporation Pond/	Aeration Lagoon		Date Received:		4/11/2008		
Lab ID:	0804138-09				Matrix:	SOIL		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed	
EPA METHOD	260B: VOLATILES	<u></u>					Analyst: BDI	
Dibromochiorom		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
Dibromomethan	e	ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM	
1,2-Dichlorobena		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
1,3-Dichlorobena		ND	0.50	I	mg/Kg	10	4/19/2008 6:35:13 PM	
1,4-Dichloroben		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
Dichlorodifluoror		ND	0.50	1	mg/Kg	10	4/19/2008 6:35:13 PM	
1,1-Dichloroetha		ND	1.0	1	mg/Kg	10	4/19/2008 6:35:13 PM	
1,1-Dichloroethe		ND	0.50	1	mg/Kg	10	4/19/2008 6:35:13 PM	
1,2-Dichloroprop		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
1,3-Dichloroprop		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
2,2-Dichloroprop		ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM	
1,1-Dichloroprop		ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM	
Hexachlorobutad		ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM	
2-Hexanone		ND	5.0		mg/Kg	10	4/19/2008 6:35:13 PM	
isopropyibenzen		0.64	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
4-laopropyitolue		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
4-Methyl-2-penta		ND	5.0		mg/Kg	10	4/19/2008 6:35:13 PM	
Methylene chlori		ND	1.5		mg/Kg	10	4/19/2008 6:35:13 PM	
n-Butyibenzene	NUO	0.65	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
n-Propylbenzena	<u>a</u>	1.4	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
sec-Butylbenzer		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
-	10	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
Styrene		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
tert-Butylbenzen		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
1,1,1,2-Tetrachi		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
1,1,2,2-Tetrachl		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
Tetrachloroethe		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
trans-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
trans-1,3-Dichlo		ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM	
1,2,3-Trichlorob		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
1,2,4-Trichlorob		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
1,1,1-Trichloroet		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
1,1,2-Trichloroe		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
Trichloroethene		ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
Trichlorofluorom		ND	1.0		mg/Kg	10	4/19/2008 6:35:13 PM	
1,2,3-Trichlorop	ropane	ND	0.50		mg/Kg	10	4/19/2008 6:35:13 PM	
Vinyl chloride		27	1.0		mg/Kg	10	4/19/2008 6:35:13 PM	
Xylenes, Total	decestions of t	94.3	68.7-122		%REC	10	4/19/2008 6:35:13 PM	
	Noroethane-d4	94.3	79.3-126		%REC	10	4/19/2008 6:35:13 PM	
	ofluorobenzene	97.5	64.4-119		%REC	10	4/19/2008 6:35:13 PM	
Sure Dibromo	ofluoromethane	97.0	04.4-118					

Value exceeds Maximum Contaminant Level

E Value above quantitation range

Qualifiers:

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

07

Client Sample ID: AL1-2-SS Western Refining Southwest, Gallup CLIENT: Collection Date: 4/10/2008 5:25:00 PM 0804138 Lab Order: Date Received: 4/11/2008 Project: Evaporation Pond/Aeration Lagoon Matrix: SOIL 0804138-10 Lab ID: **POL Qual Units** DF **Date Analyzed** Result Analyses Analyst: SCC EPA METHOD 8015B: DIESEL RANGE ORGANICS 4/17/2008 4:31:31 AM 50 190000 5000 mg/Kg Diesel Range Organics (DRO) 25000 25000 mg/Kg 50 4/17/2008 4:31:31 AM Motor Oil Range Organics (MRO) %REC 50 4/17/2008 4:31:31 AM 0 61.7-135 5 Surr: DNOP Analyst: NSB EPA METHOD 8015B: GASOLINE RANGE 4/17/2008 3:06:28 PM 250 mg/Kg 50 Gasoline Range Organics (GRO) 560 4/17/2008 3:06:28 PM 50 Surr: BFB 115 84-138 %REC Analyst: SNV EPA METHOD 7471: MERCURY 4/18/2008 4:53:58 PM 100 3.3 mg/Kg 11 Mercury Analyst: NMO EPA METHOD 6010B: SOIL METALS 4/21/2008 11:01:58 AM 11 2.5 mg/Kg 1 Arsenic 190 1.0 mg/Kg 10 4/21/2008 12:06:58 PM Barium 1 4/21/2008 11:01:58 AM 0.69 0.10 mg/Kg Cadmium 4/21/2008 11:01:58 AM 19 0.30 mg/Kg 1 Chromium 4/28/2008 8:46:35 AM 10 2.5 mg/Kg 79 Lead 4/21/2008 12:06:58 PM mg/Kg 10 ND 25 Selenium 1 4/21/2008 11:01:58 AM 0.25 Silver ND mg/Kg EPA METHOD 8270C: SEMIVOLATILES Analyst: JDC 4/17/2008 30 mg/Kg 1 ND Acenaphthene 4/17/2008 1 30 mg/Kg ND Acenaphthylene 30 mg/Kg 1 4/17/2008 ND Aniline 4/17/2008 30 mg/Kg 1 Anthracene NÐ ND 30 mg/Kg 1 4/17/2008 Azobenzene ND 30 mg/Kg 1 4/17/2008 Benz(a)anthracene ND 30 mg/Kg 1 4/17/2008 Benzo(a)pyrene ND 30 mg/Kg 1 4/17/2008 Benzo(b)fluoranthene ND 75 mg/Kg 1 4/17/2008 Benzo(g,h,i)perylene 4/17/2008 ND 30 mg/Kg 1 Benzo(k)fluoranthene 4/17/2008 ND 50 mg/Kg 1 Benzoic acid 4/17/2008 30 1 mg/Kg ND **Benzyl alcohol** 30 mg/Kg 1 4/17/2008 ND Bis(2-chloroethoxy)methane mg/Kg 30 1 4/17/2008 ND Bis(2-chloroethyl)ether 4/17/2008 Bis(2-chloroisopropyl)ether ND 30 mg/Kg 1 ND 75 mg/Kg 1 4/17/2008 Bis(2-ethylhexyl)phthalate 1 4/17/2008 ND 30 mg/Kg 4-Bromophenyl phenyl ether Butyl benzyl phthalate ND 30 mg/Kg 1 4/17/2008 ND 30 mg/Kg 1 4/17/2008 Carbazole ND 75 mg/Kg 1 4/17/2008 4-Chloro-3-methylphenol 1 4/17/2008 ND 75 mg/Kg 4-Chloroaniline Analyte detected in the associated Method Blank в Qualifiers:

#### Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

Е Value above quantitation range

Analyte detected below quantitation limits J

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits S

- н Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ŘL Reporting Limit

~~

CLIENT:	Western Refining So	outhwest, Gallup		Client Sample ID: AL1-2-SS						
Lab Order:	0804138			Col	lection Date:	4/10/2008 5:25:00 PM				
Project:	Evaporation Pond/A	eration Lagoon		Date Received:						
Lab ID:	0804138-10	U			Matrix:					
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed			
PA METHOD	8270C: SEMIVOLATILI	ES					Analyst: JD			
2-Chloronaphth		ND	38		mg/Kg	1	4/17/2008			
2-Chlorophenol		ND	30		mg/Kg	1	4/17/2008			
4-Chlorophenyl	nhanyl ether	ND	30		mg/Kg	1	4/17/2008			
Chrysene	F	ND	30		mg/Kg	1	4/17/2008			
Di-n-butyl phtha	late	ND	75		mg/Kg	1	4/17/2008			
Di-n-octyl phtha		ND	30		mg/Kg	1	4/17/2008			
Dibenz(a,h)anth		ND	30		mg/Kg	1	4/17/2008			
Dibenzofuran	recono	ND	30		mg/Kg	1	4/17/2008			
1,2-Dichloroben	7808	ND	30		mg/Kg	1	4/17/2008			
1,3-Dichloroben		ND	30		mg/Kg	1	4/17/2008			
1,4-Dichloroben		ND	30		mg/Kg	1	4/17/2008			
3,3'-Dichlorobei		ND	38		mg/Kg	1	4/17/2008			
Diethyl phthalate		ND	30		mg/Kg	1	4/17/2008			
••		ND	30		mg/Kg	1	4/17/2008			
Dimethyl phthal		ND	30		mg/Kg	1	4/17/2008			
2,4-Dichlerophe		ND	45		mg/Kg	1	4/17/2008			
2,4-Dimethylphe		ND	75			1	4/17/2008			
4,6-Dinitro-2-me		ND	75		mg/Kg mg/Kg	1	4/17/2008			
2,4-Dinitrophene			75		mg/Kg	1	4/17/2008			
2,4-Dinitrotoluer		ND			mg/Kg maika	1	4/17/2008			
2,6-Dinitrotoluer	1¢	ND	75		mg/Kg		4/17/2008			
Fluoranthene		ND	38		mg/Kg	1				
Fluorene		70	30		mg/Kg	1	4/17/2008			
Hexachlorobenz		ND	30		mg/Kg	1	4/17/2008			
Hexachlorobuta		ND	30		mg/Kg	1	4/17/2008			
Hexachlorocyclo	•	ND	30		mg/Kg	1	4/17/2008			
Hexachloroetha		ND	30		mg/Kg	1	4/17/2008			
Indeno(1,2,3-cd	)pyrene	ND	38		mg/Kg	1	4/17/2008			
Isophorone		ND	75		mg/Kg	1	4/17/2008			
2-Methylnaphtha	alene	460	38		mg/Kg	1	4/17/2008			
2-Methylphenol		ND	75		mg/Kg	1	4/17/2008			
3+4-Methylphen		42	30		mg/Kg	1	4/17/2008			
N-Nitrosodi-n-pr		ND	30		mg/Kg	1	4/17/2008			
N-Nitrosodiphen	ylamine	ND	30		mg/Kg	1	4/17/2008			
Naphthalene		79	30		mg/Kg	1	4/17/2008			
2-Nitroaniline		ND	30		mg/Kg	1	4/17/2008			
3-Nitroaniline		ND	30		mg/Kg	1	4/17/2008			
4-Nitroaniline		ND	38		mg/Kg	1	4/17/2008			
Nitrobenzene		ND	75		mg/Kg	1	4/17/2008			
2-Nitrophenol		ND	30		mg/Kg	1	4/17/2008			
4-Nitrophenol		ND	30		mg/Kg	1	4/17/2008			
Pentachloropher	nol	ND	50		mg/Kg	1	4/17/2008			
Phenanthrene		210	30		mg/Kg	1	4/17/2008			

Date: 29-Apr-08

l.

Qualifiers: \* Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

- -

CLIENT:	Western Refining	Southwest, Gallup	Client Sample ID: AL1-2-SS						
Lab Order:	0804138				-	4/10/2008	5:25:00 PM		
Project:	Evaporation Pond	Aeration Lagoon			Received:				
Lab ID:	0804138-10	Auton Eugeen		Date	Matrix:				
Analyses		Result	POL	Qual U	nits	DF	Date Analyzed		
	S270C: SEMIVOLATI						Analyst: JDC		
Phenol	DZ/UC. BEIMIVOLATI	35	30	m	g/Kg	1	4/17/2008		
		39	30		ig/Kg	1	4/17/2008		
Pyren <del>e</del> Pyridine		ND	75		g/Kg	1	4/17/2008		
1,2,4-Trichlorob		ND	30		g/Kg	1	4/17/2008		
•		ND	30		g/Kg	1	4/17/2008		
2,4,5-Trichlorop		ND	30		g/Kg	1	4/17/2008		
2,4,6-Trichlorop			35.5-141		REC	1	4/17/2008		
Surr: 2,4,6-Tr		39.2 38.1	30.4-128		REC	1	4/17/2008		
Surr: 2-Fluore	• •	90.5	28.1-129		REC	1	4/17/2008		
Surr: 2-Fluoro	•	90.5 38.1	<b>34.6-151</b>		REC	1	4/17/2008		
Surr: 4-Terph	•		26.5-122			1	4/17/2008		
Surr: Nitrober Surr: Phenol-		91.2 71.3	37.6-118		REC	1	4/17/2008		
Sun: Phenoi-	ou	r1.5	37.0-110	70	nuo.	•	4717/2008		
EPA METHOD	260B: VOLATILES						Analyst: BDI		
Benzene		5.1	0.50	m	g/K <b>g</b>	10	4/19/2008 7:10:34 PM		
Tolueno		32	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
Ethylbenzene		10	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
Methyl tert-butyl	ether (MTBE)	1,1	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
1,2,4-Trimethylb		26	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
1,3,5-Trimethylb		6.7	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
1,2-Dichloroethe		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
1,2-Dibromoetha		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
Naphthalene		19	1.0		g/Kg	10	4/19/2008 7:10:34 PM		
1-Methylnaphtha	lene	42	2.0		g/Kg	10	4/19/2008 7:10:34 PM		
2-Methylnaphtha		44	4.0		g/Kg	20	4/21/2008 1:12:46 PM		
Acetone		ND	7.5		g/Kg	10	4/19/2008 7:10:34 PM		
Bromobanzene		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
Bramodichlorom	ethane	ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
Bromoform		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
Bromomethane		NĎ	1.0		g/Kg	10	4/19/2008 7:10:34 PM		
2-Butanone		ND	5.0		g/Kg	10	4/19/2008 7:10:34 PM		
Carbon disulfide		ND	5.0		g/Kg	10	4/19/2008 7:10:34 PM		
Carbon tetrachic		ND	1.0		g/Kg	10	4/19/2008 7:10:34 PM		
Chlorobenzene		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
Chlorgethane		ND	1.0		g/Kg	10	4/19/2008 7:10:34 PM		
Chloroform		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
Chloromethane		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
2-Chlorotoluene		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
4-Chlorotoluene		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
cis-1,2-DCE		ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
cls-1,2-DOE	vonene	ND	0.50		g/Kg	10	4/19/2008 7:10:34 PM		
1,2-Dibromo-3-c	•	ND	1.0		g/Kg	10	4/19/2008 7:10:34 PM		

Date: 29-Apr-08

Ì.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

10

.

Date: 29-Apr-08

j.

Analyses	Result	PQL Qual Units	DF	Date Analyzed
Lab ID:	0804138-10	Matrix:	SOIL	
Project:	Evaporation Pond/Aeration Lagoon	Date Received:		3
Lab Order:	0804138	Collection Date:	4/10/2008	3 5:25:00 PM
CLIENT:	Western Refining Southwest, Gallup			

Analyses	Resur		uai Ontis	<i>D</i> 1	Date Manijest
EPA METHOD 8260B: VOLATILES			· · · · · · · · · · · · ·		Analyst: BD
Dibromochloromethane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
Dibromomethane	ND	1.0	mg/Kg	10	4/19/2008 7:10:34 PM
1.2-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,3-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,4-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
Dichlorodifluoromethane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,1-Dichloroethane	ND	1.0	mg/Kg	10	4/19/2008 7:10:34 PM
1,1-Dichloroethene	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,2-Dichloropropane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,3-Dichloropropane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
2,2-Dichloropropane	ND	1.0	mg/Kg	10	4/19/2008 7:10:34 PM
1,1-Dichloropropene	ND	1.0	mg/Kg	10	4/19/2008 7:10:34 PM
Hexachlorobutadiene	ND	1.0	mg/Kg	10	4/19/2008 7:10:34 PM
2-Hexanone	ND	5.0	mg/Kg	10	4/19/2008 7:10:34 PM
Isopropylbenzene	1.8	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
4-isopropyitoluene	1.0	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
4-Methyl-2-pentanone	ND	5.0	mg/Kg	10	4/19/2008 7:10:34 PM
Methylene chloride	ND	1.5	mg/Kg	10	4/19/2008 7:10:34 PM
n-Butylbenzene	2.6	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
n-Propylbenzene	4.7	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
sec-Butylbenzene	1.9	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
Styrene	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
tert-Butylbenzene	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,1,1,2-Tetrachloroethane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,1,2,2-Tetrachloroethane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
Tetrachloroethene (PCE)	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
trans-1,2-DCE	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
trans-1,3-Dichloropropene	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,2,3-Trichlorobenzene	ND	1.0	mg/Kg	10	4/19/2008 7:10:34 PM
1,2,4-Trichlorobenzene	NĎ	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,1,1-Trichloroethane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
1,1,2-Trichloroethane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
Trichloroethene (TCE)	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PM
Trichlorofiuoromethane	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PN
1,2,3-Trichloropropane	ND	1.0	mg/Kg	10	4/19/2008 7:10:34 PN
Vinyi chloride	ND	0.50	mg/Kg	10	4/19/2008 7:10:34 PN
Xylenes, Total	56	1.0	mg/Kg	10	4/19/2008 7:10:34 PM
Surr: 1,2-Dichloroethane-d4	96.3	68.7-122	%REC	10	4/19/2008 7:10:34 PN
Surr: 4-Bromofluorobenzene	91.8	79.3-126	%REC	10	4/19/2008 7:10:34 PN
Surr: Dibromofluoromethane	99.9	64.4-119	%REC	10	4/19/2008 7:10:34 PM
Surr: Toluene-d8	92.2	86.5-121	%REC	10	4/19/2008 7:10:34 PM

Value exceeds Maximum Contaminant Level Qualifiers: ٠

- Value above quantitation range Е J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits S
- Analyte detected in the associated Method Blank в
- Holding times for preparation or analysis exceeded H
- MCL Maximum Contaminant Lovel
- RL Reporting Limit

n A

CLIENT: Lab Order: Project: Lab ID:	0804138	ng Southwest, Gallup nd/Aeration Lagoon		Co	llection Dat ate Receive	D: AL1-3-SS te: 4/10/2008 td: 4/11/2008 tx: SOIL	5:35:00 PM
Analyses –		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHO	D 8015B: DIESEL RA						Analyst: SCC
	e Organics (DRO)	54000	5000		mg/Kg	50	4/17/2008 6:46:15 AM
-	nge Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 6:46:15 AM
Surr: DNC	• •	o	61.7-135	5	%REC	50	4/17/2008 6:46:15 AM
	D 8015B: GASOLINE	RANGE					Analyst: NSB
	nge Organics (GRO)	170	100		mg/Kg	20	4/18/2008 11:53:01 PM
	nge organica (orto)	112	84-138		%REC	20	4/18/2008 11:53:01 PM
Sum BFB		112	64-100		/01/04/0	20	410/2000 11:00/01 14
EPA METHO	D 7471: MERCURY						Analyst: SNV
Mercury		7.0	3.2		mg/Kg	100	4/18/2008 4:55:33 PM
	D 6010B: SOIL MET	ALS					Analyst: NMC
Arsenic		12	2.5		mg/Kg	1	4/21/2008 11:04:36 AM
Barium		210	1.0		mg/Kg	10	4/21/2008 12:11:18 PM
Cadmium		0.16	0.10		mg/Kg	1	4/21/2008 11:04:36 AM
Chromium		16	0.30		mg/Kg	1	4/21/2008 11:04:36 AM
Lead		25	0.25		mg/Kg	1	4/28/2008 8:19:16 AM
Selenium		ND	25		mg/Kg	10	4/21/2008 12:11:18 PM
Silver		ND	0.25		mg/Kg	1	4/21/2008 11:04:36 AM
Ера метил	D 8270C: SEMIVOLA						Analyst: JDC
Acenaphther		ND	30		mg/Kg	1	4/18/2008
Acenaphthyl		ND	30		mg/Kg	1	4/18/2008
Aniline		ND	30		mg/Kg	1	4/18/2008
Anthracene		ND	30		mg/Kg	1	4/18/2008
Azobenzene		ND	30		mg/Kg	1	4/18/2008
Benz(a)anthr		ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyre		ND	30		mg/Kg	1	4/18/2008
		ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluo Benzo(c h i)(		ND	75		mg/Kg	1	4/18/2008
Benzo(g,h,i); Benzo(k)fluo		ND	30		mg/Kg	1	4/18/2008
Benzoic acid		ND	50		mg/Kg	1	4/18/2008
Benzyl alcoh		ND	30		mg/Kg	1	4/18/2008
,	on hoxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroe		ND	30		mg/Kg	1	4/18/2008
	sopropyl)ether	ND	30		mg/Kg	1	4/18/2008
	xyl)phthalate	ND	75		mg/Kg	1	4/18/2008
	nyi phenyi ether	ND	30		mg/Kg	1	4/18/2008
4-bromopher Buly/benzyi	• • •	ND	30		mg/Kg	1	4/18/2008
	pricialato	ND	30		mg/Kg	1	4/18/2008
Carbazole ND 4-Chloro-3-methylphenol ND		75		mg/Kg	1	4/18/2008	
4-Chloroanili	• •	ND	75		mg/Kg	1	4/18/2008
Qualifiers:	<ul> <li>Value exceeds Max</li> </ul>	tinum Contaminant Level			B Analyte	detected in the ass	ociated Method Blank
~ munici 4)	E Value above quanti				•		ion or analysis exceeded
	-	elow quantitation limits			-	m Contaminant La	
	ND Not Detected at the				RL Reportin		
		side accented recovery lim	its			<b>.</b>	Page 41 of

Date: 29-Apr-08

S Spike recovery outside accepted recovery limits

Date: 29-Apr-08

l.

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	AL1-3-SS	
Lab Order:	0804138	<b>Collection Date:</b>	4/10/2008	5:35:00 PM
Project:	Evaporation Pond/Aeration Lagoon	Date Received:	4/11/2008	
Lab ID:	0804138-11	Matrix:	SOIL	
		POL Ousl Units	DF	Date Analyzed

Analyses	Result	PQL	Qual Uni	ts DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATIL	ES				Analyst: JD
2-Chloronaphthalene	ND	38	mg/H	(g 1	4/18/2008
2-Chlorophenol	ND	30	mg/ł	(g 1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30	mg/ł	(g 1	4/18/2008
Chrysene	ND	30	mg/ł	(g 1	4/18/2008
Di-n-butyl phthalate	ND	75	mg/h	(g 1	4/18/2008
Di-n-octyl phthalate	ND	30	mg/h	(g 1	4/18/2008
Dibenz(a,h)anthracene	ND	30	mg/ł	(g 1	4/18/2008
Dibenzofuran	ND	30	mg/ł		4/18/2008
1,2-Dichlorobenzene	ND	30	mg/H	(g 1	4/18/2008
1,3-Dichlorobenzene	ND	30	mg/F	(g 1	4/18/2008
1.4-Dichlorobenzene	ND	30	mg/h	(g 1	4/18/2008
3,3'-Dichlorobenzidine	ND	38	mg/h	(g 1	4/18/2008
Diethyl phthalate	ND	30	mg/H	-	4/18/2008
Dimethyl phthalate	ND	30	mg/k	-	4/18/2008
2,4-Dichlorophenol	ND	30	mg/k	-	4/18/2008
2,4-Dimethylphenol	ND	45	mg/h	_	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75	mg/H		4/18/2008
2,4-Dinitrophenol	ND	75	mg/H		4/18/2008
2,4-Dinitrotoluene	ND	75	mg/k		4/18/2008
2,6-Dinitrotoluene	ND	75	mg/H	-	4/18/2008
Fluoranthene	ND	38	mg/h	-	4/18/2008
Fluorene	36	30	mg/k	-	4/18/2008
Hexachlorobenzene	ND	30	mg/k		4/18/2008
Hexachlorobutadiene	ND	30	mg/H		4/18/2008
Hexachlorocyclopentadiene	ND	30	mg/k	-	4/18/2008
Hexachloroethane	ND	30	mg/k	-	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38	mg/H	-	4/18/2008
Isophorone	ND	75	mg/H	•	4/18/2008
2-Methyinaphthalene	200	38	mg/#		4/18/2008
2-Methylphenol	ND	75	mg/#	-	4/18/2008
3+4-Methylphonol	ND	30	mg/k	-	4/18/2008
N-Nitrosodi-n-propylamine	ND	30	mg/#		4/18/2008
N-Nitrosodiphenylamine	ND	30	mg/h	-	4/18/2008
Naphthalene	41	30	mg/ŀ		4/18/2008
2-Ni(roaniline	ND	30	mg/k		4/18/2008
3-Nitroaniline	ND	30	mg/k		4/18/2008
4-Nitroaniline	ND	38	mg/k		4/18/2008
Nitrobenzene	ND	75	mg/k	-	4/18/2008
2-Nitrophenol	ND	30	mg/k		4/18/2008
4-Nitrophenol	ND	30	mg/k		4/18/2008
Pentachlorophenol	ND	50	mg/K	-	4/18/2008
Phonanthrene	84	30	mg/k		4/18/2008

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

40

Client Sample ID: AL1-3-SS CLIENT: Collection Date: 4/10/2008 5:35:00 PM Lab Order: 0804138 Date Received: 4/11/2008 Evaporation Pond/Aeration Lagoon Project: Matrix: SOIL 0804138-11 Lab ID: **POL Qual Units** DF Date Analyzed Result Analyses Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES ND 30 mg/Kg 1 4/18/2008 Phenol 30 mg/Kg 1 4/18/2008 ND Pyrene 4/18/2008 75 mg/Kg 1 ND Pyridine 4/18/2008 30 1 mg/Kg ND 1.2.4-Trichlorobenzene 4/18/2008 ND 30 mg/Kg 1 2,4,5-Trichlorophenol 4/18/2008 ND 30 mg/Kg 1 2,4,8-Trichlorophenol 4/18/2008 %REC 1 Surr: 2,4,6-Tribromophenol 58.2 35.5-141 Surr: 2-Fluorobiphenyl 89.0 30.4-128 %REC 1 4/18/2008 87.3 28.1-129 %REC 1 4/18/2008 Surr: 2-Fluorophenol 4/18/2008 34.6-151 %REC 1 48.3 Surr: 4-Terphenyl-d14 26.5-122 %REC 1 4/18/2008 81.0 Surr: Nitrobenzene-d5 1 4/18/2008 %REC 67.8 37.6-118 Surr: Phenol-d5 Analyst: BDH EPA METHOD 8260B: VOLATILES 4/19/2008 7:46:22 PM 1.3 0.50 mg/Kg 10 Benzene 5.7 0.50 mg/Kg 10 4/19/2008 7:46:22 PM Toluene 0.50 mg/Kg 10 4/19/2008 7:46:22 PM 1.8 Ethylbenzene 10 4/19/2008 7:46:22 PM 0.50 ND mg/Kg Methyl tert-butyl ether (MTBE) 0.50 10 4/19/2008 7:46:22 PM 6.7 mg/Kg 1,2,4-Trimethylbenzene 0.50 10 4/19/2008 7:46:22 PM mg/Kg 1.3.5-Trimethylbenzene 1.7 4/19/2008 7:46:22 PM 0.50 mg/Kg 10 1,2-Dichloroethane (EDC) ND 0.50 mg/Kg 10 4/19/2008 7:46:22 PM 1,2-Dibromoethane (EDB) ND 4/19/2008 7:46:22 PM 4.0 1.0 mg/Kg 10 Naphthalene 4/19/2008 7:46:22 PM 10 2.0 mg/Kg 10 1-Methylnaphthalene 10 4/19/2008 7:46:22 PM 15 2.0 mg/Kg 2-Methylnaphthalene 4/19/2008 7:46:22 PM ND 7.5 mg/Kg 10 Acetone 4/19/2008 7:46:22 PM 0.50 10 ND mg/Kg Bromobenzene 10 4/19/2008 7:46:22 PM Bromodichloromethane ND 0.50 mg/Kg 0.50 10 4/19/2008 7:46:22 PM mg/Kg Bromoform ND 4/19/2008 7:46:22 PM 10 Bromomethane ND 1.0 mg/Kg ND 5.0 mg/Kg 10 4/19/2008 7:46:22 PM 2-Butanone ND 5.0 mg/Kg 10 4/19/2008 7:46:22 PM Carbon disulfide 10 4/19/2008 7:46:22 PM Carbon tetrachioride ND 1.0 mg/Kg 10 4/19/2008 7:46:22 PM ND 0.50 mg/Kg Chlorobenzene 10 4/19/2008 7:46:22 PM 1.0 mg/Kg ND Chloroethane 0.50 10 4/19/2008 7:46:22 PM ND mg/Kg Chloroform 10 4/19/2008 7:46:22 PM 0.50 mg/Kg ND Chloromethane 4/19/2008 7:46:22 PM 0.50 mg/Kg 10 2-Chlorotoluene ND 0.50 10 4/19/2008 7:46:22 PM ND mg/Kg 4-Chlorotoiuene ND 0.50 mg/Kg 10 4/19/2008 7:46:22 PM cis-1,2-DCE 4/19/2008 7:46:22 PM 0.50 mg/Kg 10 ND cls-1,3-Dichloropropene 10 4/19/2008 7:46:22 PM ND 1.0 mg/Kg 1.2-Dibromo-3-chloropropane

Western Refining Southwest, Gallup

Analyte detected in the associated Method Blank B

Holding times for preparation or analysis exceeded н

Maximum Contaminant Level MCL

RL Reporting Limit

Page 43 of 128

Analyte detected below quantitation limits 1

ND Not Detected at the Reporting Limit

Qualifiers:

Ε

5 Spike recovery outside accepted recovery limits

л л

- Value above quantitation range

Value exceeds Maximum Contaminant Level

Date: 29-Apr-08 Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

I.

## Hall Environmental Analysis Laboratory, Inc.

Lab Order:0804138Collection Date: 4/10/2008 5:35:00 PMProject:Evaporation Pond/Aeration LagoonDate Received: 4/11/2008No.0804138 11Matrix: SOIL	CLIENT:	Western Refining Southwest, Gallup	Client Sample ID: AL1-3-SS	
Matrix: SOII	Lab Order:	0804138	Collection Date: 4/10/2008 5:35:00 PM	<b>i</b> .
Matrix: SOIL	Project:	Evaporation Pond/Aeration Lagoon	Date Received: 4/11/2008	
Lat ID: 0804138-11	Lab ID:	0804138-11	Matrix: SOIL	

Analyses	Result	PQL	Qual U	nits	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50	m	g/Kg	10	4/19/2008 7:46:22 PM
Dibromomethane	ND	1.0	m	ıg/Kğ	10	4/19/2008 7:46:22 PM
1.2-Dichlorobenzene	ND	0.50	m	g/Kg	10	4/19/2008 7:46:22 PM
1,3-Dichlorobenzene	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
1.4-Dichlorobenzene	ND	0.50	៣	g/Kg	10	4/19/2008 7:46:22 PM
Dichlorodifluoromethans	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
1,1-Dichloroethane	ND	1.0	m	ig/Kg	10	4/19/2008 7:46:22 PM
1,1-Dichloroethene	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
1.2-Dichloropropane	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
1.3-Dichloropropane	ND	0.50	m	g/Kg	10	4/19/2008 7:46:22 PM
2,2-Dichloropropane	ND	1.0	m	ig/Kg	10	4/19/2008 7:46:22 PM
1,1-Dichloropropene	ND	1.0	m	ig/Kg	10	4/19/2008 7:46:22 PM
Hexachlorobutadiene	ND	1.0	m	g/Kg	10	4/19/2008 7;46:22 PM
2-Hexanone	ND	5.0	m	ig/Kg	10	4/19/2008 7:46:22 PM
sopropylbanzene	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
4-Isopropyitoluene	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
4-Methyl-2-pentanone	ND	5.0	m	ig/Kg	10	4/19/2008 7:46:22 PM
Methylene chloride	ND	1.5	m	ig/Kg	10	4/19/2008 7:46:22 PM
n-Butylbenzene	1.7	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
n-Propylbenzene	0.65	0.50	m	g/Kg	10	4/19/2008 7:46:22 PM
sec-Butylbenzene	0.82	0.50	m	g/Kg	10	4/19/2008 7:4 <del>6</del> :22 PM
Styrene	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
tert-Butylbenzene	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
1,1,1,2-Tetrachloroethane	ND	0.50	m	g/Kg	10	4/19/2008 7:46:22 PM
1,1,2,2-Tetrachloroethane	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
Tetrachloroethene (PCE)	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
trans-1,2-DCE	ND	0.50	m	g/Kg	10	4/19/2008 7:46:22 PM
trans-1,3-Dichloropropene	ND	0.50	ſĽ	ig/Kg	10	4/19/2008 7:46:22 PM
1,2,3-Trichlorobenzene	ND	1.0	m	ig/Kg	10	4/19/2008 7:46:22 PM
1,2,4-Trichlorobenzene	ND	0.50	m	g/Kg	10	4/19/2008 7:46:22 PM
1,1,1-Trichloroethane	ND	0,50	m	ig/Kg	10	4/19/2008 7:46:22 PM
1,1,2-Trichloroethane	ND	0.50	ព	ig/Kg	10	4/19/2008 7:46:22 PM
Trichloroethene (TCE)	ND	0.50	m	g/Kg	10	4/19/2008 7:46:22 PM
Trichlorofluoromethane	ND	0.50	m	ig/Kg	10	4/19/2008 7:46:22 PM
1,2,3-Trichtoropropane	ND	1.0	m	<b>g/K</b> g	10	4/19/2008 7:46:22 PM
Vinyt chloride	ND	0.50	'n	ig/Kg	10	4/19/2008 7:46:22 PM
Xylenes, Total	12	1.0	m	ig/Kg	10	4/19/2008 7:46:22 PM
Surr: 1,2-Dichloroethane-d4	96.3	68.7-122	%	REC	10	4/19/2008 7:46:22 PM
Surr: 4-Bromofluorobenzene	79.5	79.3-126	%	REC	10	4/19/2008 7:46:22 PM
Surr: Dibromofluoromethane	93.9	64.4-119	%	REC	10	4/19/2008 7:46:22 PM
Surr: Toluene-d8	95.6	86.5-121	%	REC	10	4/19/2008 7:46:22 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level
	E	Value above quantitation range

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

n 🗂

CLIENT:		Western Refining Sc	uthwest, Gallup		Clier	nt Sample	ID: AL1-4-SS	
Lab Order:		0804138	_		Co	liection D	ate: 4/10/2008	5:55:00 PM
Project:		Evaporation Pond/A	eration Lagoon				ed: 4/11/2008	
Lab ID:		0804138-12	Clation Degron		Ď		rix: SOIL	
		0804138-12	Result		Qual	Unite	DF	Date Analyzed
Analyses					Quai	Units		
		15B: DIESEL RANG					50	Analyst: SCC
		anics (DRO)	190000	5000		mg/Kg	50	4/17/2008 7:19:45 AM
	-	Organics (MRO)	ND	25000	-	mg/Kg	50	4/17/2008 7:19:45 AM
Surr: DN	OP		0	61.7-135	S	%REC	50	4/17/2008 7:19:45 AM
	OD 80	15B: GASOLINE RA	NGE					Analyst: NSE
		rganics (GRO)	280	250		mg/Kg	50	4/17/2008 4:06:44 PM
Surr: BFE	-		112	84-138		%REC	50	4/17/2008 4:06:44 PM
								Analysis CM
	OD 74	71: MERCURY					60	Analyst: SN
Mercury			9.5	1.6		mg/Kg	50	4/18/2008 4:57:08 PM
EPA METHO	OD 60	10B: SOIL METALS						Analyst: NM
Arsenic	•		9.5	2.5		mg/Kg	1	4/21/2008 11:07:15 AM
Barium			280	1.0		mg/Kg	10	4/21/2008 12:13:56 PM
Cadmium			0.48	0,10		mg/Kg	1	4/21/2008 11:07:15 AN
Chromium			24	0.30		mg/Kg	1	4/21/2008 11:07:15 AN
Lead			38	0.25		mg/Kg	1	4/28/2008 8:21:47 AM
Selenium			ND	25		mg/Kg	10	4/21/2008 12:13:56 PM
Silver			ND	0.25		mg/Kg	1	4/21/2008 11:07:15 AM
EOA METHO	<b>הה</b> 82	70C: SEMIVOLATILI	-5					Analyst: JDC
Acenaphthe			ND	30		mg/Kg	1	4/18/2008
Acenaphthy			ND	30		mg/Kg	1	4/18/2008
Aniline			ND	30		mg/Kg	1	4/18/2008
Anthracene			ND	30		mg/Kg	1	4/18/2008
Azobenzene			ND	30		mg/Kg	1	4/18/2008
Benz(a)anth		e	ND	30		mg/Kg	1	4/18/2008
Benzo(a)py		•	ND	30		mg/Kg	1	4/18/2008
Benzo(b)flu		ene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)			ND	75		mg/Kg	1	4/18/2008
Benzo(k)flue			ND	30		mg/Kg	1	4/18/2008
Benzoic acl			ND	50		mg/Kg	1	4/18/2008
Benzyl alcol			ND	30		mg/Kg	1	4/18/2008
Bis(2-chloro		/)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloro	•		ND	30		mg/Kg	1	4/18/2008
Bis(2-chloro			ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylh			ND	75		mg/Kg	1	4/18/2008
4-Bromophe			ND	30		mg/Kg	1	4/18/2008
Butyl benzyl			NO	30		mg/Kg	1	4/18/2008
Carbazole			ND	30		mg/Kg	1	4/18/2008
4-Chlora-3-r	methvl	phenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroani			ND	75		mg/Kg	1	4/18/2008
Qualifiers:	*	Value exceeds Maximun	Contaminant Level			B Analyte	e detected in the ass	ociated Method Blank
	Е	Value above quantitation				H Holding	g times for preparat	ion or analysis exceeded
	J	Analyte detected below of	-				um Contaminant La	
	ND	Not Detected at the Repo					ing Limit	- ·- ·
	S	Snike recovery outside a		its		•		Page 45 of

Date: 29-Apr-08

,

40

S Spike recovery outside accepted recovery limits

.

CLIENT:	Western Refining Sc	outhwest, Gallup				-	AL1-4-SS	
Lab Order:	0804138			Col	lectio	n Date:	4/10/2008	5:55:00 PM
Project:	Evaporation Pond/A	eration Lagoon		Da	ate Re	eceived:	4/11/2008	
Lab ID:	0804138-12	5				Matrix:		
Analyses		Result	PQL	Qual	Unit		DF	Date Analyzed
-	8270C: SEMIVOLATILI	ES						Analyst: JDC
2-Chieronaphth		ND	38		mg/K	g	1	4/18/2008
2-Chloropheno		ND	30		mg/K	g	1	4/18/2008
4-Chloropheny		ND	30		mg/K		1	4/18/2008
Chrysene	· · · · · · · · · · · · · · · · · · ·	33	30		mg/K	9	1	4/18/2008
Di-n-butyl phth	alate	ND	75		mg/K		1	4/18/2008
Di-n-octyl phth		ND	30		mg/K		1	4/18/2008
Dibenz(a,h)ant		ND	30		mg/K		1	4/18/2008
Dibenzofuran		ND	30		mg/K		1	4/18/2008
	n 7000	ND	30		mg/K	_	1	4/18/2008
1,2-Dichlorobe		ND	30		mg/K	-	1	4/18/2008
1,3-Dichlorobe		ND	30		mg/K	_	1	4/18/2008
1,4-Dichlorobe		ND	38		mg/K		1	4/18/2008
3,31-Dichlorobe		ND	30 30		mg/K		1	4/18/2008
Diethyl phthala					•	-	1	4/18/2008
Dimethyl phtha		ND	30		mg/K	-	1	4/18/2008
2,4-Dichloroph		ND	30		mg/K	-		
2,4-Dimethylph		ND	45		mg/K	_	1	4/18/2008
4,6-Dinitro-2-m	ethylphenol	ND	75		mg/K		1	4/18/2008
2,4-Dinitropher	nal	ND	75		mg/K		1	4/18/2008
2,4-Dinitrotolue	ene	ND	75		mg/K		1	4/18/2008
2,6-Dinitrotolue	ane	ND	75		mg/K	9	1	4/18/2008
Fluoranthene		ND	38		mg/K	9	1	4/18/2008
Fluorene		91	30		mg/K	9	1	4/18/2008
Hexachloroben	izene	ND	30		mg/K	g	1	4/18/2008
Hexachlorobul	adiene	NÐ	30		mg/K	g	1	4/18/2008
Hexachiorocyc	opentadiene	ND	30		mg/K	g	1	4/18/2008
Hexachioroeth	ลกอ	ND	30		mg/K	g	1	4/18/2008
Indeno(1,2,3-c	d)pyrene	ND	38		mg/K	g	1	4/18/2008
Isophorone		ND	75		mg/K	g	1	4/18/2008
2-Methylnapht	halene	530	- 38		mg/K	-	1	4/18/2008
2-Methylpheno		ND	75		mg/K		1	4/18/2008
3+4-Methylphe		ND	30		mg/K		1	4/18/2008
N-Nitrosodi-n-p		ND	30		mg/K		1	4/18/2008
N-Nitrosodiphe		ND	30		mg/K	-	1	4/18/2008
Naphthalene		94	30		mg/K	-	1	4/18/2008
2-Nitroaniline		ND	30		mg/K		1	4/18/2008
3-Nitroaniline		ND	30		mg/K		1	4/18/2008
4-Nitroaniline		ND	38		mg/K	-	1	4/18/2008
Nitrobenzene		ND	75		mg/K	-	1	4/18/2008
		ND	30		mg/K	-	1	4/18/2008
2-Nitrophenol		ND	30		mg/K		1	4/18/2008
4-Nitrophenol Pontechieronh	enal	ND	50		mg/K		1	4/18/2008
Pentachloroph Phenanthrone	610I	200	30		mg/K	-	1	4/18/2008
0	* Value exceeds Maximum	Contaminent Level		- · · · • -	в А	nalute dete	cted in the ass	ociated Method Blank
Qualifiers:						-		tion or analysis exceeded
	E Value above quantitation						es for preparat Contaminant L	
	J Analyte detected below	-						WT VI
NE	ND Not Detected at the Rep	orting Limit		ł	RL R	eporting L	anttif	Page 46 of

Date: 29-Apr-08 

49

S Spike recovery outside accepted recovery limits

CLIENT:		Western Refining South	west, Gallup		Clier	nt Sa	mple ID:	AL1-4-SS	
Lab Order:		0804138	1				-	4/10/2008	5:55:00 PM
		Evaporation Pond/Aerat	ion I agoon					4/11/2008	
Project:			Ion Engoon		D	ate 1	Matrix:		
Lab ID:	<u> </u>	0804138-12				**			D-4- A
Analyses		·····	Result	PQL	Qual	Un	1(5	DF	Date Analyzed
EPA METHO	DD 82	70C: SEMIVOLATILES							Analyst: JDC
Phenol			ND	30		mg/		1	4/18/2008
Pyrene			44	30		mg/	-	1	4/18/2008
Pyridine			ND	75		mg/	-	1	4/18/2008
1,2,4-Trichle	oroben	izêne	ND	30		mg/		1	4/18/2008
2,4,5-Trichk	orophe	nol	ND	30		mg/		1	4/18/2008
2,4,6-Trichle	prophe	enol	ND	30		mg/		1	4/18/2008
Surr: 2,4,	6-Trib	romophenol	34.3	35.5-141	S	%R		1	4/18/2008
Surr: 2-FI	luorobi	iphenyl	84.2	30.4-128		%R	EC	1	4/18/2008
Surr: 2-FI	luoropi	henol	89.3	28.1-129		%R	EC	1	4/18/2008
Surr: 4-Te	erpher	nyl-d14	40.1	34.6-151		%R		1	4/18/2008
Surr: Nite	obenzi	ene-d5	90.0	26.5-122		%R	EC	1	4/18/2008
Surr. Phe	nol-d5	i	71,5	37.6-118		%R	EC	1	4/18/2008
PA METHO	D 82	60B: VOLATILES							Analyst: BDI
Benzene			4.2	0.50		mg/	Кg	10	4/19/2008 8:21:47 PM
Toluene			19	0.50		mg/		10	4/19/2008 8:21:47 PM
Ethylbenzer	1 <del>0</del>		5.7	0.50		mg/		10	4/19/2008 8:21:47 PM
•		ther (MTBE)	ND	0.50		mg/		10	4/19/2008 8:21:47 PM
1,2,4-Trime	•		18	0.50		mg/		10	4/19/2008 8:21:47 PM
1,3,5-Trime	•		4.1	0.50		mg/		10	4/19/2008 8:21:47 PM
1,2-Dichloro	-		ND	0.50		mg/		10	4/19/2008 8:21:47 PM
1,2-Dibromo			ND	0.60		mg/	-	10	4/19/2008 8:21:47 PM
Naphthalen		0(200,	14	1.0		mg/	-	10	4/19/2008 8:21:47 PM
1-Methylnap		200	28	2.0		mg/	-	10	4/19/2008 8:21:47 PM
2-Methylnap			45	2.0		mg/		10	4/19/2008 8:21:47 PM
Acetone	A ICHERIC		ND	7.5		mg/	-	10	4/19/2008 8:21:47 PM
Bromobenzo	010		ND	0.50		mg/	-	10	4/19/2008 8:21:47 PM
Bromodichic		ihang	ND	0.50		mg/	-	10	4/19/2008 8:21:47 PM
Bromotorm	51011101		ND	0.50		mg/		10	4/19/2008 8:21:47 PM
Bromometh	ane		ND	1.0		mg/	-	10	4/19/2008 8:21:47 PM
2-Butanone			ND	5.0		mg/	-	10	4/19/2008 8:21:47 PM
Carbon disu			ND	5.0		mg/		10	4/19/2008 8:21:47 PM
Carbon tetra		de	ND	1.0		mg/	-	10	4/19/2008 8:21:47 PM
Chlorobenze		<b>-</b>	ND	0.50		mg/	-	10	4/19/2008 8:21:47 PM
Chloroethar			ND	1.0		mg/	-	10	4/19/2008 8:21:47 PM
Chloroform			ND	0.50		mg/		10	4/19/2008 8:21:47 PM
Chlorometh	ane		ND	0.50		mg/	-	10	4/19/2008 8:21:47 PM
2-Chlorototu			ND	0.50		mg/	-	10	4/19/2008 8:21:47 PM
4-Chlorotolu			ND	0.50		mg/	-	10	4/19/2008 8:21:47 PM
cis-1,2-DCE			ND	0.50		img/	-	10	4/19/2008 8:21:47 PM
cis-1,3-Dichloropropene		ND	0.50			10	4/19/2008 8:21:47 PM		
1,2-Dibromo			ND	1.0		mg/		10	4/19/2008 B:21:47 PM
Qualifiers:		Value exceeds Maximum Cor	ntaminant Level			в	Analyte dete	cted in the asso	ociated Method Blank
Annual 21	Б	Value above quantitation range							on or analysis exceeded
	E J	Analyte detected below quant	F				-	Contaminant Le	
	•	Not Detected at the Reporting					Reporting L		
ND Not D	Not Detected at the Reporting		ite.			· · · · · · · · · · · · · · · · · · ·		Page 47 of	

Unit Environmental Analysis Laboratory Inc.

S Spike recovery outside accepted recovery limits

Date: 29-Apr-08

l.

• •

**Date:** 29-Apr-08

\_\_\_\_\_

i.

## Hall Environmental Analysis Laboratory, Inc.

ï

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID: AL1-4-SS
Lab Order:	0804138	Collection Date: 4/10/2008 5:55:00 PM
Project:	Evaporation Pond/Aeration Lagoon	Date Received: 4/11/2008
Lab ID:	0804138-12	Matrix: SOIL

Analyses	Result	PQL	Quai	Units	DF	Date Analyzed
PA METHOD 8260B: VOLATILES						Analyst: BDI
Dibromochloromethane	ND	0,50		mg/Kg	10	4/19/2008 8:21:47 PM
Dibromomethane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
1.2-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1.1-Dichloroethane	ND	1.0		mg/K <b>g</b>	10	4/19/2008 8:21:47 PM
1,1-Dichlaroethene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
2.2-Dichloropropane	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PM
2-Hexanone	ND	5.0		mg/Kg	10	4/19/2008 8:21:47 PM
Isopropylbenzene	0.79	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
4-Isopropyltoluene	0.56	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
4-Methyl-2-pentanone	ND	5.0		m <b>g/Kg</b>	10	4/19/2008 8:21:47 PM
Methylene chloride	ND	1.5		mg/Kg	10	4/19/2008 8:21:47 PM
n-Butylbenzene	1.3	0.50		m <b>g/K</b> g	10	4/19/2008 8:21:47 PM
n-Propylbenzene	2.4	0.50		m <b>g/K</b> g	10	4/19/2008 8:21:47 PM
sec-Butylbenzene	1.3	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Styrene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
tert-Butylbenzene	ND	0.50		m <b>g/K</b> g	10	4/19/2008 8:21:47 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
Tetrachloroethene (PCE)	NÐ	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	4/19/2008 8:21:47 PN
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	4/19/2008 8:21:47 PM
1,1,1-Trichloroethane	ND	0.50	•	mg/Kg	10	4/19/2008 8:21:47 PN
1,1,2-Trichloroethane	ND	0.50	ł	mg/Kg	10	4/19/2008 8:21:47 PM
Trichloroathene (TCE)	NÐ	0.50	ł	mg/Kg	10	4/19/2008 8:21:47 PN
Trichlorofluoromethane	NÐ	0.50	i i	mg/Kg	10	4/19/2008 8:21:47 PM
1,2,3-Trichloropropane	ND	1.0	1	mg/Kg	10	4/19/2008 8:21:47 PM
Vinyl chloride	ND	0.50	1	mg/Kg	10	4/19/2008 8:21:47 PN
Xylenes, Total	33	1.0	<b>,</b>	mg/Kg	10	4/19/2008 8:21:47 PM
Surr: 1,2-Dichloroethane-d4	94.2	68.7-122	!	%REC	10	4/19/2008 8:21:47 PM
Surr: 4-Bromofluorobenzene	84.0	79.3-126	\$	%REC	10	4/19/2008 8:21:47 PN
Surr: Dibromofluoromethane	96.8	64.4-119	}	%REC	10	4/19/2008 8:21:47 PM
Surr: Toluene-d8	94.0	86.5-121		%REC	10	4/19/2008 8:21:47 PM

Value exceeds Maximum Contaminant Level
 Value above quantitation range

Qualifiers:

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

---

Client Sample ID: AL1-5-SS Western Refining Southwest, Gallup CLIENT: Collection Date: 4/10/2008 6:00:00 PM Lab Order: 0804138 **Evaporation Pond/Aeration Lagoon** Date Received: 4/11/2008 Project: Matrix: SOIL 0804138-13 Lab ID: DF **Date Analyzed** Result **POL Oual Units** Analyses EPA METHOD 8015B: DIESEL RANGE ORGANICS Analyst: SCC 4/17/2008 7:53:25 AM 50 Diesel Range Organics (DRO) 220000 5000 mg/Kg ND 25000 mg/Kg 50 4/17/2008 7:53:25 AM Motor Oil Range Organics (MRO) 4/17/2008 7:53:25 AM Ş %REC 50 Surr: DNOP 0 61.7-135 Analyst: NSB EPA METHOD 8015B: GASOLINE RANGE 50 4/17/2008 4:36:45 PM 280 250 mg/Kg Gasoline Range Organics (GRO) 4/17/2008 4:36:45 PM %REC 50 Surr: BFB 117 84-138 Analyst: SNV EPA METHOD 7471: MERCURY 50 4/28/2008 2:35:00 PM 1.6 mg/Kg 9,9 Mercury Analyst: NMO EPA METHOD 6010B: SOIL METALS 4/21/2008 11:09:54 AM 12 2.5 mg/Kg 1 Arsenic 360 1.0 mg/Kg 10 4/21/2008 12:16:35 PM Barium 0.10 mg/Kg 1 4/21/2008 11:09:54 AM 0.20 Cadmium 0.30 mg/Kg 1 4/21/2008 11:09:54 AM 13 Chromium 1 4/28/2008 8:24:19 AM 30 0.25 mg/Kg Lead 4/21/2008 12:16:35 PM ND 25 mg/Kg 10 Selenium 4/21/2008 11:09:54 AM 0.25 mg/Kg 1 ND Silver Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 30 mg/Kg 1 4/18/2008 ND Acenaphthene 30 4/18/2008 ND mg/Kg 1 Acenaphthylene 4/18/2008 1 ND 30 mg/Kg Aniline 4/18/2008 NO 30 mg/Kg 1 Anthracene 4/18/2008 1 Azobenzene ND 30 mg/Kg 4/18/2008 ND 30 mg/Kg 1 Benz(a)anthracene 1 4/18/2008 ND 30 mg/Kg Benzo(a)pyrene ND 30 mg/Kg 1 4/18/2008 Benzo(b)fluoranthene ND 75 mg/Kg 1 4/18/2008 Benzo(g,h,i)perviene 30 1 4/18/2008 ND mg/Kg Benzo(k)fluoranthene 50 4/18/2008 ND mg/Kg 1 Benzolc acid 30 1 4/18/2008 ND mg/Kg Benzyl alcohol 1 4/18/2008 ND 30 mg/Kg Bis(2-chloroethoxy)methane 4/18/2008 ND 30 mg/Kg 1 Bis(2-chloroethyl)ether 4/18/2008 30 1 Bis(2-chloroisopropyl)ether ND mg/Kg 75 1 4/18/2008 Bis(2-ethylhexyl)phthalate ND mg/Kg NØ 30 mg/Kg 1 4/18/2008 4-Bromophenyl phenyl ether 4/18/2008 ND 30 mg/Kg 1 Butyl benzyl phthalate ND 30 mg/Kg 1 4/18/2008 Carbazole 1 4/18/2008 ND 75 mg/Kg 4-Chloro-3-methylphenol 4/18/2008 ND 75 mg/Kg 1 4-Chloroaniline Value exceeds Maximum Contaminant Level Qualifiers:

#### Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

- Analyte detected below quantitation limits J
- Not Detected at the Reporting Limit ND.
- Spike recovery outside accepted recovery limits S
- в Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- MCL Maximum Contaminant Level
- RL Reporting Limit

- -

Date: 29-Apr-08

l.

CLIENT:	Western Refining Southwest, Gallup	Client Sample 1D: AL1-5-SS
Lab Order:	0804138	Collection Date: 4/10/2008 6:00:00 PM
Project:	Evaporation Pond/Aeration Lagoon	Date Received: 4/11/2008
Lab ID:	0804138-13	Matrix: SOIL
	Result	POL Qual Units DF Date Analyzed

Inalyses	Result	PQL	Qual U	Juns	DF	Date Analyzeu
	· · · · · · · · · · · · · · · · · · ·					Analyst: JDC
PA METHOD 8270C: SEMIVOLATILES	ND	38	n	ng/Kg	1	4/18/2008
2-Chloronaphthalene	ND	30		ng/Kg	1	4/18/2008
2-Chlorophenol	ND	30		ng/Kg	1	4/18/2008
4-Chiorophenyl phenyl ether	ND	30		ng/Kg	1	4/18/2008
Chrysene	ND	75		ng/Kg	1	4/18/2008
Di-n-butyl phthalate		30		ng/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30		ng/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30		ng/Kg	1	4/18/2008
Dibenzofuran	ND	30		ng/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30		ng/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30		ng/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	38		ng/Kg ng/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND			ng/Kg	1	4/18/2008
Diethyl phthalate	ND	30			1	4/18/2008
Dimethyl phthalate	ND	30		ng/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30		ng/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45		ng/Kg 	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		mg/Kg		4/18/2008
2,6-Dinitrotoluene	ND	75		m <b>g/K</b> g	1	4/18/2008
Fluoranthene	ND	38		mg/Kg	1	
Fluorene	84	30		mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		m <b>g/K</b> g	1	4/18/2008
Hexachloroethane	ND	30		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		mg/Kg	1	4/18/2008
Isophorone	ND	75		mg/Kg	1	4/18/2008
2-Methylnaphthalene	600	38		mg/Kg	1	4/18/2008
2-Methylphenol	ND	75		mg/Kg	1	4/18/2008
3+4-Methylphenol	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30	I	mg/Kg	1	4/18/2008
Naphihalene	110	30		mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30		mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38	Ļ	mg/Kg	1	4/18/2008
Nitrobenzene	ND	75	,	mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30	i	mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30	ì	mg/Kg	1	4/18/2008
Pentachlorophenol	ND .	50	1	mg/Kg	1	4/18/2008
Phenanthrene	220	30	)	mg/Kg	1	4/18/2008

		and the second s
Qualifiers:	*	Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

۲1

CLIENT: Western Refining Southwest, Gallup					it Sample ID:			
Lab Order: 0804138				Collection Date:		4/10/2008	6:00:00 PM	
Project:	Evaporation Pond/Aera	ion Lagoon		D	ate Received:			
Lab ID:	0804138-13				Matrix:	SOIL		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed	
EPA METHOD	8270C: SEMIVOLATILES	······		•			Analyst: JDC	
Phenoi		ND	30		mg/Kg	1	4/18/2008	
Pyrene		ND	30		mg/Kg	1	4/18/2008	
Pyridine		ND	75		mg/Kg	1	4/18/2008	
1,2,4-Trichlorob	enzene	ND	30		mg/Kg	1	4/18/2008	
2,4,5-Trichlorop	henol	ND	30		mg/Kg	1	4/18/2008	
2,4,6-Trichlorop	henol	ND	30		mg/Kg	1	4/18/2008	
Surr: 2,4,6-T	ribromophenol	21.9	35.5-141	S	%REC	1	4/18/2008	
Surr: 2-Fluore	obiphenyl	68.1	30.4-128		%REC	1	4/18/2008	
Surr: 2-Fluore	ophenol	79.4	28.1-129		%REC	1	4/18/2008	
Surr: 4-Terph	enyl-d14	33.5	34,6-151	S	%REC	1	4/18/2008	
Surr: Nitrober	nzene-d5	98.4	26.5-122		%REC	1	4/18/2008	
Surr: Phenol-	d5	62.6	37.6-118		%REC	1	4/18/2008	
EPA METHOD	8260B: VOLATILES						Analyst: BDI	
Benzene		5.9	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
Toluene		24	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
Ethylbenzene		6.1	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
Methyl tert-buty	l ether (MTBE)	1. <b>1</b>	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
1,2,4-Trimethyl		16	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
1,3,5-Trimethylt		4.0	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
1,2-Dichloroeth		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
1,2-Dibromoeth		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
Naphthalene		14	1.0		mg/Kg	10	4/19/2008 10:43:34 PM	
1-Methyinaphth	alene	29	2.0		mg/Kg	10	4/19/2008 10:43:34 PM	
2-Methylnaphth		43	2.0		mg/Kg	10	4/19/2008 10:43:34 PM	
Acetone		ND	7.5		mg/Kg	10	4/19/2008 10:43:34 PM	
Bromobenzene		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM	
Bromodichloron	nethane	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
Bromoform		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM	
Bromomethane		ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PN	
2-Butanone		ND	5.0		mg/Kg	10	4/19/2008 10:43:34 PM	
Carbon disulfide	2	ND	5.0		mg/Kg	10	4/19/2008 10:43:34 PN	
Carbon tetrachi		ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PN	
Chlorobenzene		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
Chloroethane		ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PN	
Chloroform		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
Chloromethane		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM	
2-Chlorotoluene		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
4-Chtorotoluene		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PM	
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
cis-1,3-Dichloro	propene	ND	0.50		mg/Kg	10	4/19/2008 10:43:34 PN	
1,2-Dibromo-3-0		ND	1.0		mg/Kg	10	4/19/2008 10:43:34 PN	

Date: 29-Apr-08

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

**~**~

Date: 29-Apr-08

#### Hall Environmental Analysis Laboratory, Inc. Western Refining Southwest, Gallup Client Sample ID: AL1-5-SS **CLIENT:**

Lab Order: 0804138 Collection Date: 4/10/2008 6:00:00 PM **Evaporation Pond/Aeration Lagoon** Project: Date Received: 4/11/2008 Matrix: SOIL Lab ID: 0804138-13

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES		6 0		·····	Analyst: BDH
Dibromochioromethane	ND	0,50	mg/Kg	10	4/19/2008 10:43:34 PM
Dibromomethane	ND	1.0	mg/Kg	10	4/19/2008 10:43:34 PM
1,2-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,3-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,4-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
Dichlorodifluoromethane	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,1-Dichloroethane	ND	1.0	mg/Kg	10	4/19/2008 10:43:34 PM
1,1-Dichloroethene	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,2-Dichloropropane	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,3-Dichloropropane	NÐ	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
2,2-Dichloropropane	ND	1.0	mg/Kg	10	4/19/2008 10:43:34 PM
1,1-Dichloropropene	ND	1.0	m <b>g/K</b> g	10	4/19/2008 10:43:34 PM
Hexachlorobutadiene	ND	1.0	mg/Kg	10	4/19/2008 10:43:34 PM
2-Hexanone	ND	5.0	mg/Kg	10	4/19/2008 10:43:34 PM
Isopropy/benzene	1.2	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
4-Isopropyltoluene	0.71	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
4-Methyl-2-pentanone	ND	5.0	mg/Kg	10	4/19/2008 10:43:34 PM
Methylene chloride	ND	1.5	mg/Kg	10	4/19/2008 10:43:34 PM
n-Butylbenzene	3.0	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
n-Propylbenzene	2.5	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
sec-Bulylbenzene	1.2	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
Styrene	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
tert-Butylbanzene	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,1,1,2-Tetrachloroethane	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,1,2,2-Tetrachloroethane	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
Tetrachloroethene (PCE)	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
trans-1,2-DCE	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
trans-1,3-Dichloropropene	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,2,3-Trichlorobenzene	ND	1.0	mg/Kg	10	4/19/2008 10:43:34 PM
1,2,4-Trichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,1,1-Trichloroethane	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,1,2-Trichloroethane	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
Trichioroethene (TCE)	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
Trichlorofluoromethane	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
1,2,3-Trichloropropane	ND	1.0	mg/Kg	10	4/19/2008 10:43:34 PM
Vinyl chtoride	ND	0.50	mg/Kg	10	4/19/2008 10:43:34 PM
Xylenes, Total	35	1.0	mg/Kg	10	4/19/2008 10:43:34 PM
Surr: 1,2-Dichloroethane-d4	95.9	68.7-122	%REC	10	4/19/2008 10:43:34 PM
Surr: 4-Bromofluorobenzene	85.8	79.3-126	%REC	10	4/19/2008 10:43:34 PM
Surr. Dibromofluoromethane	99.9	64.4-119	%REC	10	4/19/2008 10:43:34 PM
Sutr: Toluene-d8	97.7	86.5-121	%REC	10	4/19/2008 10:43:34 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level
	Е	Value above quantitation range
		a construction of the second

- Analyte detected below quantitation limits 1
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits \$
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded H
- MCL Maximum Contaminant Level
- RL Reporting Limit

CLIENT:	Western Refining S	outhwest, Gallup		Clie	nt Sample ID:	EP1-6	
Lab Order:	0804138			Co	llection Date:	4/9/2008	7:10:00 PM
Project:	Evaporation Pond/A	eration Lagoon		D	ate Received:	4/11/2008	}
Lab ID:	0804138-14				Matrix:	SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
PA METHOD 8	0158: DIESEL RANG	E ORGANICS	·····			·	Analyst: SCC
Diesel Range Or		180000	5000		mg/Kg	50	4/17/2008 8:27:16 AM
-	Organics (MRO)	26000	25000		mg/Kg	50	4/17/2008 8:27:16 AM
Sam DNOP		0	61.7-135	S	%REC	50	4/17/2008 8:27:16 AM
EPA METHOD 8	0158: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range		ND	100		mg/Kg	20	4/19/2008 12:23:11 AM
Surr: BFB	/	108	84-138		%REC	20	4/19/2008 12:23:11 AM
PA METHOD 7	471: MERCURY						Analyst: SNV
Mercúry	- · · · ·	4.1	1.6		mg/Kg	50	4/28/2008 2:38:12 PM
PA METHOD 6	010B: SOIL METALS						Analyst: NMO
Arsenic		3.2	2.5		mg/Kg	1	4/21/2008 11:12:34 AM
Barium		330	1.0		mg/Kg	10	4/21/2008 12:19:14 PM
Cadmium		0.26	0.10		mg/Kg	1	4/21/2008 11:12:34 AM
Chromium		8.8	0.30		mg/Kg	1	4/21/2008 11:12:34 AM
Lead		16	0.25		mg/Kg	t	4/28/2008 8:26:49 AM
Selenium		ND	25		mg/Kg	10	4/21/2008 12:19:14 PM
Silver		ND	0.25		mg/Kg	1	4/21/2008 11:12:34 AM
	270C: SEMIVOLATILI	ES					Analyst: JDC
Aconaphthono		ND	30		mg/Kg	1	4/18/2008
Aconaphthylene		ND	30		mg/Kg	1	4/18/2008
Aniline		ND	30		mg/Kg	1	4/18/2008
Anthracene		ND	30		mg/Kg	1	4/18/2008
Azobenzene		ND	30		mg/Kg	1	4/18/2008
Benz(a)anthrace	ne	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene		ND	30		mg/Kg	1	4/18/2008
3enzo(b)fluoranti		ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)peryl		ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluoranti	hene	ND	30		mg/Kg	1	4/18/2008
Benzolc acid		ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol		ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroetho)		ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)		ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisoph		ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)p		ND	76		mg/Kg	1	4/18/2008
I-Bromophenyl p		ND	30		mg/Kg	1	4/18/2008
Bulyl benzyl phth	alate	ND	30		mg/Kg	1	4/18/2008
Carbazole		ND	30		mg/Kg	1	4/18/2008
1-Chloro-3-methy	Iphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroanlline		ND	75		m <b>g/K</b> g	1	4/18/2008
)ualifiers: *	Value exceeds Maximum				-		sociated Method Blank
E	Value above quantitation	-			_	• •	tion or analysis exceeded
J	Analyte detected below of					Contaminant L	¢YCI
ND	•		10	E	L Reporting Li		Page 53 of 1
S	Spike recovery outside a	source recovery film					-

## Uall Environmental Analysis Laboratory Inc. Date: 29-Apr-08

Date: 29-Apr-08

l.

LIENT:	Western Refining Southwest, Gallup	Client Sample JD: EP1-6
ab Order:	0804138	Collection Date: 4/9/2008 7:10:00 PM
ect:	Evaporation Pond/Aeration Lagoon	Date Received: 4/11/2008
b ID:	0804138-14	Matrix: SOIL

Analyses	Result	PQL	Qual U	Inits	DF	Date Analyzed
EPA METHOD 8270C; SEMIVOLATILES						Analyst: JD0
2-Chloronaphthalene	ND	38	n	ng/Kg	1	4/18/2008
2-Chlorophenol	ND	30	n	ng/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30	n	ng/Kg	1	4/18/2008
Chrysene	40	30	a	ng/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75	n	ng/K <b>g</b>	1	4/18/2008
Di-n-octyl phthalate	ND	30	រា	ng/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30	n	ng/Kg	1	4/18/2008
Dibenzofuran	ND	30	n	ng/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30	n	ng/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30	អា	ng/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30	η	ng/Kg	1	4/18/2008
3.3 -Dichlorobenzidine	ND	38	n	ng/Kg	1	4/18/2008
Diethyl phthalate	ND	30	n	ng/Kg	1	4/18/2008
Dimethyl phthalate	ND	30	'n	ng/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30	n	ng/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45	'n	ng/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75	n	ng/Kg	1	4/18/2008
2,4-Dinitrophenol	ND	75	'n	ng/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75		ng/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75		ng/Kg	1	4/18/2008
Fluoranthene	NO	38		ng/Kg	1	4/18/2008
Fluorene	70	30		ng/Kg	1	4/18/2008
Hexachlorobenzene	ND	30		ng/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30		ng/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30		ng/Kg	1	4/18/2008
Hexachloroethane	ND	30		ng/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38		ng/Kg	1	4/18/2008
Isophorone	ND	75		ng/Kg	1	4/18/2008
2-Methylnaphthalene	210	38		ng/Kg	1	4/18/2008
2-Methylphenol	ND	75		ng/Kg	1	4/18/2008
3+4-Methylphenol	ND	30		ig/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30		ng/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30		ng/Kg	1	4/18/2008
Naphthalene	ND	30		ıg/Kg	1	4/18/2008
2-Nitroaniline	ND	30		ig/Kg	1	4/18/2008
3-Nitroaniline	ND	30		ng/Kg	1	4/18/2008
4-Nitroaniline	ND	38		ng/Kg	1	4/18/2008
Nitrobenzene	ND	75		ng/Kg	1	4/18/2008
2-Nitrophenol	ND	30		ng/Kg	1	4/18/2008
4-Nitrophenoi	ND	30		ng/Kg	1	4/18/2008
Pentachlorophenol	ND	50		ng/Kg	1	4/18/2008
Phenanthrene	150	30		ng/Kg	1	4/18/2008

#### Qualifiers: \* Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected befow quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

сc

CLIENT:	west, Gallup		Clien	t Sample ID:	EP1-6			
Lab Order:	0804138				lection Date:	4/9/2008 7:10:00 PM		
Project:	Evaporation Pond/Aera	tion Lagoon		Da	te Received:	4/11/2008		
Lab ID: 0804138-14		-			Matrix:	SOIL		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed	
EPA METHOD	B270C: SEMIVOLATILES						Analyst: JD0	
Phenol		ND	30		mg/Kg	1	4/18/2008	
Pyrene		41	30		mg/Kg	1	4/18/2008	
Pyridine		ND	75		mg/Kg	1	4/18/2008	
1,2,4-Trichiorob	enzene	ND	30		mg/Kg	1	4/18/2008	
2,4,5-Trichlorop	henol	ND	30		mg/Kg	1	4/18/2008	
2,4,6-Trichlorop	henol	ND	30		mg/Kg	1	4/18/2008	
Surr: 2,4,6-Tr	ibromophenol	39.8	35.5-141		%REC	1	4/18/2008	
Surr: 2-Fluoro		81.0	30.4-128		%REC	1	4/18/2008	
Surr: 2-Fluore		87.3	28.1-129		%REC	1	4/18/2008	
Surr: 4-Terph		47.1	34.6-151		%REC	1	4/18/2008	
Surr: Nitrober	•	63.5	26.5-122		%REC	1	4/18/2008	
Surr: Phenol-	d5	65.5	37.6-118		%REC	1	4/18/2008	
	8260B: VOLATILES						Analyst: BDI	
Benzene		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PA	
Toluene		0.63	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
Ethylbenzene		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
Methyl tert-bulyl	ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
1,2,4-Trimethylb		2.2	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
1,3,5-Trimethylb		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
1,2-Dichloroetha		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
1,2-Dibromoetha		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
Naphthalene	10 (LDD)	2.8	1.0		mg/Kg	10	4/19/2008 11:18:48 PM	
1-Methylnaphtha	lene	15	2.0		mg/Kg	10	4/19/2008 11.18:48 PM	
2-Methylnaphtha		19	2.0		mg/Kg	10	4/19/2008 11:18:48 PM	
-		ND	7.5		mg/Kg	10	4/19/2008 11:18:48 PM	
Acetone		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
Bromobenzene Bromodichlorom	ethane	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
_	emano .	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
Bromoform		ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM	
Bromomethane 2-Butanone		ND	5.0		mg/Kg	10	4/19/2008 11:18:48 PM	
Carbon disulfide		ND	5.0		mg/Kg	10	4/19/2008 11:18:48 PM	
Carbon tetrachic		ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM	
Chlorobenzene	/////	ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
Chloroethane		ND	1.0		mg/Kg	10	4/19/2008 11:18:48 PM	
		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
Chloroform Chloromethane		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PM	
2-Chlorotoluene		ND	0.50		mg/Kg	10	4/19/2008 11:18:48 PN	
4-Chiorotoluene						10	4/19/2008 11:18:48 PM	
cis-1,2-DCE		ND	0.50		mg/Kg ma/Ka			
cis-1,3-Dichlorop	propene	ND ND	0.50 1.0		mg/Kg mg/Kg	10 10	4/19/2008 11:18:48 PN 4/19/2008 11:18:48 PN	

Date: 29-Apr-08

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- $\mathbf{S} = \mathbf{S} \mathbf{p} \mathbf{i} \mathbf{k} \mathbf{c}$  recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

---

Date: 29-Apr-08

Ì.

-----

# Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID: EP1-6
Lab Order:	0804138	Collection Date: 4/9/2008 7:10:00 PM
Project:	<b>Evaporation Pond/Aeration Lagoon</b>	Date Received: 4/11/2008
Lab ID:	0804138-14	Matrix: SOIL

Analyses	Result	PQL	Qual I	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromochloromethane	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
Dibromomethane	ND	1.0	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,2-Dichlorobanzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1.3-Dichlorobenzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,4-D chiorobenzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
Dichlorodifluoromethane	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1.1-Dichloroethane	ND	1.0	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,1-Dichloroethene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,2-Dichloropropane	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,3-Dichloropropane	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
2,2-Dichloropropane	ND	1.0	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,1-Dichloropropene	ND	1.0	r	ng/Kg	10	4/19/2008 11:18:48 PM
Hexachlorobuladiene	ND	1.0	r	ng/Kg	10	4/19/2008 11:18:48 PM
2-Hexanone	ND	5.0	г	ng/Kg	10	4/19/2008 11:18:48 PM
isopropyibenzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
4-Isopropyltoluene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
4-Methyl-2-pentanone	ND	5.0	г	ng/Kg	10	4/19/2008 11:18:48 PM
Methylene chloride	ND	1.5	٢	ng/Kg	10	4/19/2008 11:18:48 PM
n-Buly/benzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
n-Propylbanzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
sec-Butylbenzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
Styrene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
tert-Butylbenzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,1,1,2-Tetrachloroethane	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,1,2,2-Tetrachioroethane	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
Tetrachloroethene (PCE)	ND	0.50		ng/Kg	10	4/19/2008 11:18:48 PM
trans-1,2-DCE	ND	0.50		ng/Kg	10	4/19/2008 11:18:48 PM
trans-1,3-Dichloropropene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1.2.3-Trichlorobenzene	ND	1.0	r	ng/Kg	10	4/19/2008 11:18:48 PM
1.2.4-Trichlorobenzene	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,1,1-Trichloroethane	ND	0.50	ſ	ng/Kg	10	4/19/2008 11:18:48 PM
1,1,2-Trichloroethane	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
Trichloroethene (TCE)	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
Trichlorofluoromethane	NÐ	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
1,2,3-Trichloropropane	ND	1.0	r	ng/Kg	10	4/19/2008 11:18:48 PM
Vinyl chloride	ND	0.50	r	ng/Kg	10	4/19/2008 11:18:48 PM
Xylenes, Total	1.3	1.0	r	ng/Kg	10	4/19/2008 11:18:48 PN
Surr: 1,2-Dichloroethane-d4	98.2	68.7-122	C	%REC	10	4/19/2008 11:18:48 PM
Surr: 4-Bromofluorobenzene	92.6	79.3-126	9	%REC	10	4/19/2008 11:18:48 PM
Surr: Dibromofluoromethane	99.2	64.4-119	-	%REC	10	4/19/2008 11:18:48 PM
Surr: Toluene-d8	97.7	86.5-121	9	%REC	10	4/19/2008 11:18:48 PM

Qualifiers:

۰

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Value exceeds Maximum Contaminant Level

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Client Sample ID: EP1-7 Western Refining Southwest, Gallup CLIENT: Collection Date: 4/9/2008 7:35:00 PM 0804138 Lab Order: Date Received: 4/11/2008 Evaporation Pond/Aeration Lagoon **Project:** Matrix: SOIL 0804138-15 Lab ID: DF Date Analyzed **POL Oual Units** Result Analyses Analyst: SCC EPA METHOD 8015B: DIESEL RANGE ORGANICS 50 4/17/2008 9:01:21 AM 200000 5000 mg/Kg Diesel Range Organics (DRO) 4/17/2008 9:01:21 AM 25000 25000 mg/Kg 50 Motor Oil Range Organics (MRO) 4/17/2008 9:01:21 AM 61.7-135 %REC 50 0 s Surr: DNOP Analyst: NSB EPA METHOD 8015B: GASOLINE RANGE 20 4/19/2008 12:53:17 AM ND 100 mg/Kg Gasoline Range Organics (GRO) 4/19/2008 12:53:17 AM 20 102 84-138 %REC Surr: BFB Analyst: SNV EPA METHOD 7471: MERCURY 50 4/28/2008 2:41:25 PM 1.6 mg/Kg 4.4 Mercury Analyst: NMO EPA METHOD 6010B: SOIL METALS 4/21/2008 11:15:14 AM 3.6 2.5 mg/Kg 1 Arsenic 280 1.0 mg/Kg 10 4/21/2008 12:21:53 PM Barlum 0.10 mg/Kg 1 4/21/2008 11:15:14 AM 0.27 Cadmium mg/Kg 1 4/21/2008 11:15:14 AM 8.3 0.30 Chromium 1 4/28/2008 8:29:20 AM 0.25 mg/Kg 9.7 Lead 4/21/2008 12:21:53 PM 25 mg/Kg 10 27 Selenium 4/21/2008 11:15:14 AM 0.25 mg/Kg 1 ND Silver Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES ND 30 mg/Kg 1 4/18/2008 Acenaphthene ND 30 mg/Kg 1 4/18/2008 Acenaphthylene 1 4/18/2008 30 ND mg/Kg Aniline 1 4/18/2008 ND 30 mg/Kg Anthracene 4/18/2008 1 30 mg/Kg Azobenzene ND 1 4/18/2008 35 30 mg/Kg Benz(a)anthracene 1 4/18/2008 ND 30 mg/Kg Benzo(a)pyrene 4/18/2008 NÐ 30 mg/Kg 1 Benzo(b)fluoranthene ND 75 mg/Kg 1 4/18/2008 Benzo(g,h,i)parylene 4/18/2008 30 mg/Kg 1 ND Benzo(k)fluoranthene 50 mg/Kg 1 4/18/2008 ND Benzoic acid 30 mg/Kg 1 4/18/2008 ND Benzyl alcohol 1 4/18/2008 30 mg/Kg ND Bis(2-chloroethoxy)methane 30 1 4/18/2008 ND mg/Kg Bis(2-chloroethyl)ether 4/18/2008 30 mg/Kg 1 ND Bis(2-chloroisopropyl)ether 4/18/2008 75 mg/Kg 1 Bis(2-ethylhexyl)phthalate ND 4/18/2008 ND 30 mg/Kg 1 4-Bromophanyl phenyl ether 4/18/2008 ND 30 mg/Kg 1 Butyl benzyl phthalate 4/18/2008 ND 30 mg/Kg 1 Carbazole 4/18/2008 75 mg/Kg 1 ND 4-Chloro-3-methylphenol 4/18/2008 ND 75 mg/Kg 1 4-Chloroaniline

Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

\* Value exceeds Maximum Contaminant Level

E Value above quantitation range

Qualifiers:

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Client Sample ID: EP1-7 Western Refining Southwest, Gallup CLIENT: Collection Date: 4/9/2008 7:35:00 PM 0804138 Lab Order: Date Received: 4/11/2008 **Evaporation Pond/Aeration Lagoon Project:** Matrix: SOIL 0804138-15 Lab ID: PQL Qual Units **Date Analyzed** DF Result Analyses Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 4/18/2008 NÐ 38 mg/Kg 1 2-Chioronaphthalene 30 mg/Kg 1 4/18/2008 NÐ 2-Chlorophenol 4/18/2008 1 30 mg/Kg ND 4-Chlorophenyl phenyl ether 4/18/2008 30 mg/Kg 1 74 Chrysene 4/18/2008 1 ND 75 mg/Kg Di-n-butyl phthalate 1 4/18/2008 30 mg/Kg ND Di-n-octyl phthalate 1 4/18/2008 ND 30 mg/Kg Dibenz(a,h)anthracene 4/18/2008 ND 30 mg/Kg 1 Dibenzofuran 30 mg/Kg 1 4/18/2008 ND 1,2-Dichlorobenzene 4/18/2008 30 mg/Kg 1 ND 1.3-Dichlorobenzene 30 mg/Kg 1 4/18/2008 ND 1.4-Dichtorobenzene 4/18/2008 1 38 mg/Kg ND 3,3'-Dichlorobenzidine 1 4/18/2008 30 mg/Kg ND Diethyl phthalate 4/18/2008 30 1 mg/Kg NÐ Dimethyl phthalate 4/18/2008 30 1 ND mg/Kg 2,4-Dichlorophenol 4/18/2008 1 ND 45 mg/Kg 2,4-Dimethylphenol 1 4/18/2008 ND 75 mg/Kg 4,6-Dinitro-2-methylphenol 4/18/2008 75 mg/Kg 1 ND 2,4-Dinitrophenol 4/18/2008 1 ND 75 mg/Kg 2,4-Dinitrotoluene 1 4/18/2008 75 mg/Kg ND 2.6-Dinitrotoluene 4/18/2008 1 mg/Kg ND 38 Fluoranthene 1 4/18/2008 30 mg/Kg 77 Fluorene 1 4/18/2008 mg/Kg Hexachlorobenzene ND 30 30 mg/Kg 1 4/18/2008 ND Hexachlorobutadiene 30 1 4/18/2008 ND mg/Kg Hexachlorocyclopentadiene 1 4/18/2008 30 mg/Kg ND Hexachloroethane 38 mg/Kg 1 4/18/2008 ND Indeno(1,2,3-cd)pyrene 1 4/18/2008 75 mg/Kg ND Isophorone 4/18/2008 38 mg/Kg 1 260 2-Methylnaphthalene 4/18/2008 75 1 mg/Kg ND 2-Methylphenol 4/18/2008 1 ND 30 mg/Kg 3+4-Methylphenol 1 4/18/2008 ND 30 mg/Kg N-Nitrosodi-n-propylamine 1 4/18/2008 30 mg/Kg N-Nitrosodiphenylamine ND 1 4/18/2008 30 mg/Kg ND Naphthalene 1 4/18/2008 30 mg/Kg ND 2-Nitroaniline 4/18/2008 1 ND 30 mg/Kg 3-Nitroaniline ND 38 mg/Kg 1 4/18/2008 4-Nitroaniline 75 mg/Kg 1 4/18/2008 ND Nitrobenzene 4/18/2008 30 mg/Kg 1 ND 2-Nitrophenol mg/Kg 4/18/2008 30 1 ND 4-Nitrophenol 1 4/18/2008 50 mg/Kg ND Pentachlorophenol 30 mg/Kg 1 4/18/2008 240 Phenanthrene

#### Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

Qualifiers: \* Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

-

CLIENT:	Western Refining Se	outhwest, Gallup		Clier	it Sample ID:	EP1-7			
Lab Order:	0804138		tion Lagoon		llection Date:	4/9/2008 7:35:00 PM			
Project:	Evaporation Pond/A	eration Lagoon			ate Received:	4/11/2008			
Lab ID:	<b>0804138-</b> 15				Matrix:	SOIL			
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed		
EPA METHOD	270C: SEMIVOLATIL	ES					Analyst: JDC		
Phenol		ND	30		mg/Kg	1	4/18/2008		
Pyrene		70	30		mg/Kg	1	4/18/2008		
Pyridine		ND	75		mg/Kg	1	4/18/2008		
1,2,4-Trichlorob	enzene	ND	30		mg/Kg	1	4/18/2008		
2,4,5-Trichloropi	henol	ND	30		mg/Kg	1	4/18/2008		
2,4,6-Trichlorop	henol	ND	30	4	mg/Kg	1	4/18/2008		
Surr: 2,4,6-Tr	ibromophenol	33.5	35.5-141	S	%REC	1	4/18/2008		
Surr: 2-Fluoro	biphenyl	82.2	30.4-128		%REC	1	4/18/2008		
Surr: 2-Fluoro	phenol	88.1	28.1-129		%REC	1	4/18/2008		
Surr: 4-Terph	enyl-d14	39.7	34.6-151		%REC	1	4/18/2008		
Surr: Nitrober		62.9	26.5-122		%REC	1	4/18/2008		
Surr: Phenol-	d5	60.7	37.6-118		%REC	1	4/18/2008		
PA METHOD	260B: VOLATILES						Analyst: BDI		
Benzene		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
Toluene		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
Ethylbenzene		ND	0.50		m <b>g/Kg</b>	10	4/19/2008 11:54:29 PM		
Methyl tert-butyl	ether (MTBE)	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PN		
1,2,4-Trimethylb		1.7	0.50		mg/Kg	10	4/19/2008 11:54:29 PN		
1,3,5-Trimethylb		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
1,2-Dichloroetha		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
1 2-Dibromoetha		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
Naphthalene		1.7	1.0		mg/Kg	10	4/19/2008 11:54:29 PM		
1-Methylnaphtha	ilene	9.1	2.0		mg/Kg	10	4/19/2008 11:54:29 PM		
2-Methylnaphtha		12	2.0		mg/Kg	10	4/19/2008 11:54:29 PN		
Acetone		ND	7.5		mg/Kg	10	4/19/2008 11:54:29 PM		
Bromobenzene		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PN		
Bromodichlorom	ethane	ND	0.50		mg/K <b>g</b>	10	4/19/2008 11:54:29 PM		
Bromoform		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
Bromomethane		ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM		
2-Butanone		ND	5.0		mg/Kg	10	4/19/2008 11:54:29 PM		
Carbon disulfide		ND	5.0		mg/Kg	10	4/19/2008 11:54:29 PM		
Carbon tetrachio	ride	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PM		
Chlorobenzene		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PN		
Chloroethane		ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PN		
Chloroform		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
Chloromethane		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
2-Chlorotoluene		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
4-Chlorotoluene		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PM		
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PN		
cis-1,3-Dichlorop	ropene	ND	0.50		mg/Kg	10	4/19/2008 11:54:29 PN		
	hloropropane	ND	1.0		mg/Kg	10	4/19/2008 11:54:29 PN		

Date: 29-Apr-08

l.

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits S

MCL Maximum Contaminant Level

RL Reporting Limit

**~**~

Date: 29-Apr-08

ł

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	EP1-7	
Lab Order:	0804138	Collection Date:	4/9/2008 7	7:35:00 PM
Project:	<b>Evaporation Pond/Aeration Lagoon</b>	Date Received:	4/11/2008	
Lab ID:	0804138-15	Matrix:	SOIL	
··· ··	Decult	DOI Quel Unite	nr	Data Analyzard

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
PA METHOD 8260B: VOLATILES					Analyst: BDH
Dibromochloromethane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
Dibromomethane	ND	1.0	mg/Kg	10	4/19/2008 11:54:29 PM
1,2-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,3-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,4-Dichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
Dichlorodifluoromethane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,1-Dichloroethane	ND	1.0	mg/Kg	10	4/19/2008 11:54:29 PM
1,1-Dichloroethene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,2-Dichloropropane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,3-Dichloropropane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
2,2-Dichloropropane	ND	1.0	m <b>g/Kg</b>	10	4/19/2008 11:54:29 PM
1.1-Dichloropropene	ND	1.0	mg/Kg	10	4/19/2008 11:54:29 PM
Hexachlorobutadiene	ND	1.0	mg/Kg	10	4/19/2008 11:54:29 PM
2-Hexanone	ND	5.0	mg/Kg	10	4/19/2008 11:54:29 PM
Isopropylbenzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
4-lsopropyltoluene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
4-Methyl-2-pentanone	ND	5.0	mg/Kg	10	4/19/2008 11:54:29 PM
Methylene chloride	ND	1.5	mg/Kg	10	4/19/2008 11:54:29 PM
n-Butylbenzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
n-Propylbenzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
sec-Butylbenzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
Styrene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
tert-Buly/benzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,1,1,2-Tetrachloroethane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,1,2,2-Tetrachloroethane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
Tetrachloroethene (PCE)	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
trans-1,2-DCE	ND	0,50	mg/Kg	10	4/19/2008 11:54:29 PM
trans-1,3-Dichloropropene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,2,3-Trichlorobenzene	ND	1.0	mg/Kg	10	4/19/2008 11:54:29 PM
1,2,4-Trichlorobenzene	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,1,1-Trichloroethane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,1,2-Trichloroethane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
Trichloroethene (TCE)	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
Trichlorofiuoromethane	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
1,2,3-Trichloropropane	ND	1.0	mg/Kg	10	4/19/2008 11:54:29 PM
Vinyl chloride	ND	0.50	mg/Kg	10	4/19/2008 11:54:29 PM
Xylenes, Total	ND	1.0	mg/Kg	10	4/19/2008 11:54:29 PM
Surr: 1,2-Dichloroethane-d4	97,2	68.7-122	%REC	10	4/19/2008 11:54:29 PM
Sur: 1,2-Dichlorobenzene	91.1	79.3-122	%REC	10	4/19/2008 11:54:29 PM
Surr: Dibromofluoromethane	103	64.4-1 <b>1</b> 9	%REC	10	4/19/2008 11:54:29 PM
Surr: Dibromoliuolomethane Surr: Totuene-d8	98.2	86.5-121	%REC	10	4/19/2008 11:54:29 PM

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

i.

CLIENT: Lab Order:				Co	it Sample ID: llection Date:	4/9/2008 7	':17:00 PM
Project:	Evaporation Pond/Aerati	on Lagoon		Date Received:			
Lab ID:	0804138-16				Matrix:	SOIL	·····
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANGE OF	GANICS					Analyst: SCC
Diesel Range C		150000	5000		mg/Kĝ	50	4/17/2008 9:35:41 AM
	e Organics (MRO)	ND	25000		mg/Kg	50	4/17/2008 9:35:41 AM
Surr: DNOP		0	61.7-135	S	%REC	50	4/17/2008 9:35:41 AM
	8015B: GASOLINE RANGE						Analyst: NSE
	e Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 1:23:23 AM
Surr: BFB	, , , , , , , , , , , , , , , , , , ,	108	84-138		%REC	20	4/19/2008 1:23:23 AM
	7471: MERCURY						Analyst: SN\
Mercury		4.9	1.6		mg/Kg	50	4/28/2008 2:44:40 PM
	6010B: SOIL METALS						Analyst: NM
	BUIDE: SOIL METALS	11	2.5		mg/Kg	1	4/21/2008 11:17:52 AN
Barium		120	1.0		mg/Kg	10	4/21/2008 12:24:33 PM
Cadmium		0.80	0.10		mg/Kg	1	4/21/2008 11:17:52 AN
Chromium		58	3.0		mg/Kg	10	4/21/2008 12:24:33 PM
Lead		15	0.25		mg/Kg	1	4/28/2008 8:31:51 AM
Selenium		ND	25		mg/Kg	10	4/21/2008 12:24:33 PM
Silver		ND	0.25		mg/Kg	1	4/21/2008 11:17:52 AM
	8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	02100.01.01.01.01.01.01.01.01	ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	<b>_</b>	ND	30		mg/Kg	1	4/18/2008
Aniline	<u>ل</u>	ND	30		mg/Kg	1	4/18/2008
Anthracene		ND	30		mg/Kg	1	4/18/2008
Azobenzene		ND	30		mg/Kg	1	4/18/2008
Benz(s)anthrac	ene	NĎ	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene		ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluorar		ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)per		ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluorar		ND	30		mg/Kg	1	4/18/2008
Benzoic acid		ND	50		mg/Kg	1	4/18/2008
Benzyl alcohol		ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroeth	oxy)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroeth)	yl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroiso)	propyl)ether	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexy	I)phthalate	ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl	phenyl ether	ND	30		mg/Kg	1	4/18/2008
Butyl benzyl ph	thalate	ND	30		mg/Kg	1	4/18/2008
Carbazole		ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-met	hylphenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline		ND	75		mg/Kg	1	4/18/2008

Value exceeds Maximum Contaminant Level

E Value above quantitation range

Qualifiers:

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Date: 29-Apr-08

l.

Analyses	Result	PQL Qual Units	DF	Date Analyzed
Lab ID:	0804138-16	Matrix:	SOIL	
Project:	Evaporation Pond/Aeration Lagoon	Date Received:		3
Lab Order:	0804138	Collection Date:	4/9/2008	7:17:00 PM
CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:		

Analyses	Resurt	түр (	Zual Onits	Dr	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES		· · · · · · · · · · · · · · · · · · ·			Analyst: JDC
2-Chloronaphthalene	ND	38	mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30	mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	NO	30	mg/Kg	1	4/18/2008
Chrysene	ND	30	mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75	mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30	mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30	mg/Kg	1	4/18/2008
Dibenzofuran	ND	30	mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30	mg/Kg	1	4/18/2008
1.3-Dichlorobenzene	ND	30	mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30	mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38	mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30	mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30	mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30	mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45	mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75	mg/Kg	1	4/18/2008
2.4-Dinitrophenol	ND	75	mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75	mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75	mg/Kg	t	4/18/2008
Fluoranthene	ND	38	mg/Kg	1	4/18/2008
Fluorene	41	30	mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30	mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30	mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30	mg/Kg	1	4/18/2008
Hexachloroethane	NÐ	30	mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	NÐ	38	mg/Kg	1	4/18/2008
Isophorone	ND	75	mg/Kg	1	4/18/2008
2-Methylnaphthalene	110	38	mg/Kg	1	4/18/2008
2-Methylphenol	ND	75	mg/Kg	1	4/18/2008
3+4-Methylphenol	ND	30	mg/Kg	1	4/18/2008
N-Nitrosodi-n-propylamine	ND	30	mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30	mg/Kg	1	4/18/2008
Naphthalene	ND	30	mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30	mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30	mg/Kg	1	4/18/2008
4-Nitroaniline	ND	38	mg/Kg	1	4/18/2008
Nitrobenzene	ND	75	mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30	mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30	mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50	mg/Kg	1	4/18/2008
Phenanthrene	120	30	mg/Kg	1	4/18/2008

Qualifiers: \* Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

en

Client Sample ID: EP1-8 Western Refining Southwest, Gallup **CLIENT:** Collection Date: 4/9/2008 7:17:00 PM Lab Order: 0804138 **Evaporation Pond/Aeration Lagoon** Date Received: 4/11/2008 **Project:** Matrix: SOIL 0804138-16 Lab ID: DF **Date Analyzed** Result **PQL** Qual Units Analyses Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 1 4/18/2008 ND 30 mg/Kg Phenol 4/18/2008 ND 30 mg/Kg 1 Pyrene 4/18/2008 ND 75 mg/Kg 1 **Pvridine** 4/18/2008 1,2,4-Trichlorobenzene NÐ 30 mg/Kg 1 4/18/2008 2,4,5-Trichlorophenol ND 30 mg/Kg 1 4/18/2008 ND 30 mg/Kg 1 2,4,6-Trichlorophenol 49.2 35.5-141 %REC 1 4/18/2008 Surr: 2,4,6-Tribromophenol %REC 1 4/18/2008 30.4-128 84.2 Surr: 2-Fluorobiphenyl 28.1-129 %REC 4/18/2008 86.1 1 Surr: 2-Fluorophenol 4/18/2008 34.6-151 %REC 1 47.3 Surr: 4-Terphenyl-d14 4/18/2008 26.5-122 %REC 1 Surr: Nitrobenzene-d5 62.5 4/18/2008 %REC 1 Surr: Phenol-d5 66.3 37.6-118 Analyst: BDH EPA METHOD 82608: VOLATILES 10 4/20/2008 12:29:39 AM ND 0.60 mg/Kg Benzene 4/20/2008 12:29:39 AM 0.50 10 0.54 mg/Kg Toluene 4/20/2008 12:29:39 AM ND 0.50 mg/Kg 10 Ethylbenzene 4/20/2008 12:29:39 AM ND 0.50 mg/Kg 10 Methyl tert-butyl ether (MTBE) 4/20/2008 12:29:39 AM 1,2,4-Trimethylbenzene 1.2 0.50 mg/Kg 10 NO 0.50 mg/Kg 10 4/20/2008 12:29:39 AM 1,3,5-Trimethylbenzene 10 4/20/2008 12:29:39 AM ND 0.50 mg/Kg 1,2-Dichloroethane (EDC) 10 4/20/2008 12:29:39 AM ND 0.50 mg/Kg 1,2-Dibromoethane (EDB) 10 4/20/2008 12:29:39 AM 1.6 1.0 mg/Kg Naphthalene 10 4/20/2008 12:29:39 AM 8.1 2.0 mg/Kg 1-Methylnaphthalene 10 4/20/2008 12:29:39 AM 2.0 2-Methylnaphthalene 11 mg/Kg ND 7.5 mg/Kg 10 4/20/2008 12:29:39 AM Acetone ND 0.50 mg/Kg 10 4/20/2008 12:29:39 AM Bromobenzene ND 0.50 mg/Kg 10 4/20/2008 12:29:39 AM Bromodichioromethane ND 0.50 mg/Kg 10 4/20/2008 12:29:39 AM Bromoform 10 4/20/2008 12:29:39 AM ND 1.0 mg/Kg Bromomethane 10 ND 5.0 mg/Kg 4/20/2008 12:29:39 AM 2-Butanone 4/20/2008 12:29:39 AM ND 6.0 mg/Kg 10 Carbon disulfide 10 4/20/2008 12:29:39 AM NÐ 1.0 mg/Kg Carbon tetrachloride 0.50 10 4/20/2008 12:29:39 AM ND mg/Kg Chlorobenzene 10 4/20/2008 12:29:39 AM ND 1.0 mg/Kg Chloroethane 4/20/2008 12:29:39 AM Chloroform ND 0.50 mg/Kg 10 4/20/2008 12:29:39 AM ND 0.50 mg/Kg 10 Chloromethane ND 0.50 mg/Kg 10 4/20/2008 12:29:39 AM 2-Chlorotoluene ND 0.50 mg/Kg 10 4/20/2008 12:29:39 AM 4-Chlorotoluene 0.50 10 4/20/2008 12:29:39 AM mg/Kg cis-1.2-DCE ND 0.50 mg/Kg 10 4/20/2008 12:29:39 AM ND cis-1,3-Dichloropropene mg/Kg 10 4/20/2008 12:29:39 AM ND 1.0 1,2-Dibromo-3-chloropropane

Qualifiers:	*	Value exceeds Maximum Contaminant Level
	E	Value above quantitation range

- 1
- Analyte detected below quantitation limits

Hall Environmental Analysis Laboratory, Inc.

- Not Detected at the Reporting Limit ND
- S Spike recovery outside accepted recovery limits

Analyte detected in the associated Method Blank 8

Date: 29-Apr-08

- Holding times for preparation or analysis exceeded H
- MCL Maximum Contaminant Level
- Reporting Limit RL

~ 1

CLIENT:	Western Refining	Southwest, Gallup		Clien	t Sample ID:				
Lab Order:	0804138			Collection Date: 4/9/2008 7:17:00 PM					
Project:	Evaporation Pond	I/Aeration Lagoon		D	ate Received:	4/11/2008			
Lab ID:	0804138-16			Matrix:		SOIL			
Analyses	·	Result	PQL	Qual	Units	DF	Date Analyzed		
PA METHOD	8260B: VOLATILES						Analyst: BDF		
Dibromochloron	nethane	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
Dibromomethan	0	ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM		
1,2-Dichloroben	zene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,3-Dichloroben	zene	ND	0.50		m <b>g/K</b> g	10	4/20/2008 12:29:39 AM		
1,4-Dichloroben	zene	ND	0.60		m <b>g/Kg</b>	10	4/20/2008 12:29:39 AM		
Dichlorodifluoro		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,1-Dichioroetha		ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM		
1,1-Dichloroethe		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,2-Dichloroprop		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,3-Dichloroprop		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
2,2-Dichloroprop		ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM		
1.1-Dichloroprop		ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM		
Hexachlorobuta		ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM		
2-Hexanone		ND	5.0		mg/Kg	10	4/20/2008 12:29:39 AM		
Isopropylbenzer	he	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
4-Isopropyitolue		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
4-Methyl-2-pent		ND	5.0		mg/Kg	10	4/20/2008 12:29:39 AM		
Methylene chlori		ND	1.5		mg/Kg	10	4/20/2008 12:29:39 AM		
n-Butylbonzene		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
n-Propylbenzen	a	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
sec-Butylbenzer		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
Styrene		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
tert-Butylbenzen		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,1,1,2-Tetrachle		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,1,2,2-Tetrachie		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
Tetrachioroethei		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
trans-1,2-DCE		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
trans-1,3-Dichlor	raarononene	ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,2,3-Trichlorobe		ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM		
1,2,4-Trichlorob		NÐ	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,1,1-Trichloroet		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,1,2-Trichtoroet		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
Trichloraethene		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
Trichlorofluorom		ND	0.50		mg/Kg	10	4/20/2008 12:29:39 AM		
1,2,3-Trichloropi		ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM		
Vinyl chloride		ND	0.60		mg/Kg	10	4/20/2008 12:29:39 AM		
Xylenes, Total		ND	1.0		mg/Kg	10	4/20/2008 12:29:39 AM		
•	loroethane-d4	96.9	68.7-122		%REC	10	4/20/2008 12:29:39 AM		
-	ofluorobenzene	90.7	79.3-126		%REC	10	4/20/2008 12:29:39 AM		
	ofluoromethane	96.4	64.4-119		%REC	10	4/20/2008 12:29:39 AM		
Suu: Dibioluo	-d8	99.8 99.8	86.5-121		%REC	10	4/20/2008 12:29:39 AM		

Date: 29-Apr-08

j.

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Value exceeds Maximum Contaminant Level

- Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

В

~~

	Western Refining So	uthwest, Gallup		Clier	nt Sample ID:	BD-2	
Lab Order:	0804138			Co	llection Date:	4/9/2008	
Project:	Evaporation Pond/Ac	eration Lagoon		D	ate Received:	4/11/2008	
Lab ID:	0804138-19				Matrix:		
Analyses	<i></i>	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	015B: DIESEL RANGE	ORGANICS					Analyst: SC
Diesel Range O	rganics (DRO)	350000	5000		mg/Kg	50	4/17/2008 5:27:25 Pt
Motor Oil Range	Organics (MRO)	52000	25000		mg/Kg	50	4/17/2008 5:27:25 PI
Surr: DNOP		0	61.7-135	s	%REC	50	4/17/2008 5:27:25 PI
EPA METHOD	015B: GASOLINE RAM	IGE					Analyst: NS
Gasoline Range	Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 1:53:15 AM
Surr: BFB	• • •	103	84-138		%REC	20	4/19/2008 1:53:15 A
EPA METHOD 7	471: MERCURY						Analyst: SN
Mercury		5.5	1.6		mg/Kg	50	4/28/2008 2:51:14 PM
EPA METHOD 6	010B: SOIL METALS						Analyst: Ni
Arsenic		14	2.5		mg/Kg	1	4/23/2008 8:07:03 AM
Barium		210	1.0		mg/Kg	10	4/23/2008 9:21:38 AM
Cadmium		0.40	0.10		mg/Kg	1	4/23/2008 8:07:03 AN
Chromium		16	0.30		mg/Kg	1	4/23/2008 8:07:03 AN
Lead		29	0.25		mg/Kg	1	4/28/2008 9:36:28 AM
Selenium		ND	25		mg/Kg	10	4/23/2008 9:21:38 AM
Silver		ND	0.25		mg/Kg	1	4/28/2008 9:36:28 AN
EPA METHOD 8	270C: SEMIVOLATILE	5					Analyst: JD
Acenaphthene		- ND	30		mg/Kg	1	4/18/2008
Acenaphthylene		ND	30		mg/Kg	1	4/18/2008
Aniline		ND	30		mg/Kg	1	4/18/2008
Anthracene		ND	30		mg/Kg	1	4/18/2008
Azobenzene		ND	30		mg/Kg	1	4/18/2008
Benz(a)anthrace	ne	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene		ND	30		mg/Kg	1	4/18/2008
			30		mg/Kg	1	4/18/2008
Benzo(b)fluorant	iene	ND	30				
Benzo(b)fluorant Benzo(g,h,i)peryl		ND ND	30 75		mg/Kg	1	4/18/2008
	ene				mg/Kg mg/Kg	1 1	4/18/2008 4/18/2008
Benzo(g,h,i)peryl	ene	ND	75		mg/Kg mg/Kg mg/Kg	1 1 1	
Benzo(g,h,i)peryl Benzo(k)fluoranti	ene	ND ND	75 30		mg/Kg	-	4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid	ene nene	ND ND ND	75 30 50		mg/Kg mg/Kg	1	4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohoł	ene nene y)methane	ND ND ND ND	75 30 50 30		mg/Kg mg/Kg mg/K <b>g</b>	1	4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohot Bis(2-chloroethoo	ene tene y)methane ether	ND ND ND ND	75 30 50 30 30		mg/Kg mg/Kg mg/K <b>g</b> mg/Kg	<b>1</b> 1	4/18/2008 4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohoł Bis(2-chloroethoy Bis(2-chloroethyl	ene vene v)methane ether ppyl)ether	ND ND ND ND ND	75 30 50 30 30 30		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	<b>1</b> 1 1 1	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohot Bis(2-chloroetho) Bis(2-chloroethy) Bis(2-chloroethy)	ene v)methane ether opyl)ether ohthalate	ND ND ND ND ND ND	75 30 50 30 30 30 30		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	1 1 1 1 1	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohoł Bis(2-chloroetho) Bis(2-chloroethyl Bis(2-chloroisopr Bis(2-chtoroisopr	ene v)methane ether opyl)ether ohthalate henyl ether	ND ND ND ND ND ND ND	75 30 50 30 30 30 30 75		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	1 1 1 1 1	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohoł Bis(2-chloroetho) Bis(2-chloroethyl Bis(2-chloroisopr Bis(2-chloroisopr Bis(2-chloroisopr) 4-Bromophenyl p	ene v)methane ether opyl)ether ohthalate henyl ether	ND ND ND ND ND ND ND	75 30 30 30 30 30 30 75 30		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	1 1 1 1 1 1	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohol Bis(2-chloroethol Bis(2-chloroethol Bis(2-chloroethyl Bis(2-chtoroisopr Bi	ene nene y)methane rether opyl)ether ohthalate henyl other alate	ND ND ND ND ND ND ND ND	75 30 30 30 30 30 75 30 30 30		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	1 1 1 1 1 1 1	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohol Bis(2-chloroethol Bis(2-chloroethol Bis(2-chloroethol Bis(2-chloroisopr Bi	ene nene y)methane rether opyl)ether ohthalate henyl other alate	ND ND ND ND ND ND ND ND ND	75 30 30 30 30 30 75 30 30 30		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	1 1 1 1 1 1 1 1	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohot Bis(2-chloroethoy Bis(2-chloroethyl Bis(2-chloroethyl Bis(2-chloroisopr Bis(2-ethylhexyt)) 4-Bromophenyl p Butyl benzyl phth Carbazole 4-Chloro-3-methy 4-Chloroanlline	ene nene y)methane ether opyl)ether obthalate henyl other alate lphenol Value exceeds Maximum (	ND ND ND ND ND ND ND ND ND ND ND ND	75 30 30 30 30 30 75 30 30 30 30 75	 E	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	1 1 1 1 1 1 1 1 1 1 1 1 1	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohol Bis(2-chloroethol Bis(2-chloroethol Bis(2-chloroethol Bis(2-chloroisopr Bis(2-chloroisopr Bis(2-chloroisopr Bis(2-chloroisopr Bis(2-chlorophenyl p Butyl benzyl phth Carbazole 4-Chloro-3-methy 4-Chloroanlline	ene vene vy)methane ether opyl)ether obthalate henyl other alate lphenol Value exceeds Maximum ( Value above quantitation r	ND ND ND ND ND ND ND ND ND ND ND ND ND N	75 30 30 30 30 30 75 30 30 30 30 75		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	1 1 1 1 1 1 1 1 1 1 1 ted in the association	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 50 ciated Method Blank n or analysis exceeded
Benzo(g,h,i)peryl Benzo(k)fluoranti Benzoic acid Benzyl alcohot Bis(2-chloroethoy Bis(2-chloroethyl Bis(2-chloroethyl Bis(2-chloroisopr Bis(2-ethylhexyt)) 4-Bromophenyl p Butyl benzyl phth Carbazole 4-Chloro-3-methy 4-Chloroanlline	ene vene y)methane ether opyl)ether ohthalate henyl ether alate lphenol Value exceeds Maximum ( Value above quantitation r Analyte detected below qua	ND ND ND ND ND ND ND ND ND ND ND ND ND N	75 30 30 30 30 30 75 30 30 30 30 75	 E	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg Mg/Kg Analyte detec I Holding times CL Maximum Co	1 1 1 1 1 1 1 1 1 1 1 ted in the asso- s for preparatio ntaminant Lev	4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 4/18/2008 50 ciated Method Blank n or analysis exceeded

### Hall Environmental Analysis Laboratory Inc

Date: 29-Apr-08

Date: 29-Apr-08

	<b>U</b>						
CLIENT: Lab Order: Project:	Western Refining S 0804138 Evaporation Pond/2			Col	it Sample ID: llection Date: ate Received:	4/9/2008 4/11/2008	
Lab ID:	0804138-19				Matrix:	SOIL	••• <del>••</del>
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC	
2-Chioronaphth		ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol		ND	30		mg/Kg	1	4/18/2008
4-Chlorophenyl		ND	30		mg/Kg	1	4/18/2008
Chrysene	priority office	49	30		mg/Kg	1	4/18/2008
Di-n-butyl phth:	alate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phtha		ND	30		mg/Kg	1	4/18/2008
Dibenz(a,h)ant		ND	30		mg/Kg	1	4/18/2008
Dibenzofuran	macono	36	30		mg/Kg	1	4/18/2008
1,2-Dichlorobei	n76/16	ND	30		mg/Kg	1	4/18/2008
1.3-Dichlorobei		ND	30		mg/Kg	1	4/18/2008
1,4-Dichlorobei		ND	30		mg/Kg	1	4/18/2008
3,3'-Dichlorobe		ND	38		mg/Kg	1	4/18/2008
- 1 -		ND	30		mg/Kg	1	4/18/2008
Diethyl phthala Dimethyl phtha		ND	30		mg/Kg	1	4/18/2008
Dimethyi phtha		ND	30		mg/Kg	1	4/18/2008
2,4-Dichloroph		ND	45		mg/Kg	1	4/18/2008
2,4-Dimethylph		ND	75		mg/Kg	1	4/18/2008
4,6-Dinitro-2-m		ND	75		mg/Kg	1	4/18/2008
2,4-Dinitropher		ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotolue		ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotolue	aue	ND	38		mg/Kg	1	4/18/2008
Fluoranthene		130	30		mg/Kg	1	4/18/2008
Fluorene		130	00		malKa	1	4/18/2008

30

30

30

30

38

75

75

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Z-IMeutymaphulaiono			•••	
2-Methylphonol	ND	75	mg/Kg	1
3+4-Methylphenol	35	30	mg/Kg	1
N-Nitrosodi-n-propylamine	ND	30	mg/Kg	1
N-Nitrosodiphenylamine	ND	30	mg/Kg	1
Naphthalene	67	30	mg/Kg	1
2-Nitroaniline	ND	30	mg/Kg	1
3-Nitroaniline	ND	30	mg/Kg	1
4-Nitroaniline	NÐ	38	mg/Kg	1
Nitrobenzene	ND	75	mg/Kg	1
2-Nitrophenol	ND	30	mg/Kg	1
4-Nitrophenol	ND	30	mg/Kg	1
Pentachlorophenol	ND	50	mg/Kg	1
Phenanthrene	310	30	mg/Kg	1
				·

ND

ND

ND

ND

ND

ND

640

Value exceeds Maximum Contaminant Level ٠ Qualifiers:

Hexachtorobenzene

**Hexachloroethane** 

Isophorone

Hexachlorobutadiene

Indeno(1,2,3-cd)pyrene

2-Methylnaphthalene

Hexachterocyclopentadiene

- Value above quantitation range E
- Analyte detected below quantitation limits J
- Not Detected at the Reporting Limit ND

Spike recovery outside accepted recovery limits S

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Н

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/20/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

4/18/2008

1

1

1

1

1

1

2

- MCL Maximum Contaminant Level
- RL Reporting Limit

<u>~</u>7

Client Sample ID: BD-2 Western Refining Southwest, Gallup CLIENT: Collection Date: 4/9/2008 0804138 Lab Order: Date Received: 4/11/2008 **Evaporation Pond/Aeration Lagoon Project:** Matrix: SOIL 0804138-19 Lab ID: DF PQL Qual Units **Date Analyzed** Result Analyses Analyst: JDC EPA METHOD 8270C: SEMIVOLATILES 4/18/2008 ND 30 mg/Kg 1 Phonol 30 mg/Kg 1 4/18/2008 51 Pyrene 4/18/2008 1 75 mg/Kg ND Pyridine 1 4/18/2008 30 mg/Kg ND 1,2,4-Trichlorobenzene 1 4/18/2008 mg/Kg ND 30 2,4,5-Trichtorophenol 4/18/2008 mg/Kg 1 ND 30 2,4,6-Trichlorophenol 4/18/2008 %REC 1 35.5-141 19.9 S Surr: 2,4,6-Tribromophenol 4/18/2008 1 0 30.4-128 s %REC Surr: 2-Fluorobiphenyl 4/18/2008 28.1-129 %REC 1 83.7 Surr: 2-Fluoraphenol 1 4/18/2008 34.6-151 %REC 45.1 Surr: 4-Terphenyl-d14 4/18/2008 26.5-122 %REC 1 84.4 Surr: Nitrobenzene-d5 1 4/18/2008 %REC 37.6-118 66.9 Surr: Phenol-d5 Analyst: BDH EPA METHOD 8260B: VOLATILES 4/20/2008 1:05:19 AM mg/Kg 10 ND 0.50 Benzene 4/20/2008 1:05:19 AM 0.50 mg/Kg 10 1.2 Toluene 4/20/2008 1:05:19 AM 0.50 mg/Kg 10 ND Ethylbenzene 4/20/2008 1:05:19 AM 10 mg/Kg ND 0.50 Methyl tert-butyl other (MTBE) 10 4/20/2008 1:05:19 AM 0.50 mg/Kg 3.6 1,2,4-Trimethylbenzene 4/20/2008 1:05:19 AM 10 mg/Kg 0.50 0.56 1,3,5-Trimethylbenzene 4/20/2008 1:05:19 AM 10 mg/Kg ND 0.50 1,2-Dichloroethane (EDC) 4/20/2008 1:05:19 AM mg/Kg 10 1,2-Dibromoethane (EDB) ND 0.50 4/20/2008 1:05:19 AM 4.1 1.0 mg/Kg 10 Naphthalene 10 4/20/2008 1:05:19 AM 2.0 mg/Kg 21 1-Methylnaphthalene 4/20/2008 1:05:19 AM 10 2.0 mg/Kg 24 2-Methylnaphthalene 10 4/20/2008 1:05:19 AM 7.5 mg/Kg ND Acetone 10 4/20/2008 1:05:19 AM ND 0.50 mg/Kg Bromobenzene 4/20/2008 1:05:19 AM mg/Kg 10 ND 0.50 Bromodichloromethane 4/20/2008 1:05:19 AM 10 mg/Kg ND 0.50 Bromoform 4/20/2008 1:05:19 AM 10 ND 1.0 mg/Kg Bromomethane 4/20/2008 1:05:19 AM 5.0 mg/Kg 10 ND 2-Butanone 4/20/2008 1:05:19 AM mg/Kg 10 ND 5.0 Carbon disulfide 4/20/2008 1:05:19 AM 10 ND 1.0 mg/Kg Carbon tetrachloride 10 4/20/2008 1:05:19 AM ND 0.50 mg/Kg Chlorobenzene 10 4/20/2008 1:05:19 AM mg/Kg ND 1.0 Chloroethane 4/20/2008 1:05:19 AM 10 ND 0.50 mg/Kg Chloroform 10 4/20/2008 1:05:19 AM mg/Kg 0.50 ND Chloromethane 4/20/2008 1:05:19 AM 10 mg/Kg ND 0.50 2-Chlorotoluene 4/20/2008 1:05:19 AM 10 0.50 mg/Kg ND 4-Chlorotoluene 4/20/2008 1:05:19 AM 0.50 mg/Kg 10 ND cis-1,2-DCE 10 4/20/2008 1:05:19 AM ND 0.50 mg/Kg cis-1,3-Dichloropropene 4/20/2008 1:05:19 AM 10 1.0 mg/Kg ND 1,2-Dibromo-3-chloropropane

### Hall Environmental Analysis Laboratory, Inc.

Date: 29-Apr-08

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

- 00

Date: 29-Apr-08

l.

CLIENT:	Western Refining Sc	outhwest, Gallup			t Sample ID: lection Date:		
Lab Order:	0804138						
Project:	Evaporation Pond/A	eration Lagoon		Da	ate Received:		
Lab ID:	0804138-19			<u>.</u>	Matrix:		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8	260B: VOLATILES						Analyst: BDH
Dibromochlorom		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Dibromomethan		ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1,2-Dichloroben	zene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,3-Dichloroben		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1.4-Dichloroben:		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Dichlorodifluoro		ND	0.50		m <b>g/K</b> g	10	4/20/2008 1:05:19 AM
1,1-Dichloroetha		ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1,1-Dichloroethe		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2-Dichloroprop		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,3-Dichloroprop		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
2,2-Dichloroprop		ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1,1-Dichloroprop		ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
Hexachlorobula		ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
2-Hexanone		ND	5.0		m <b>g/Kg</b>	10	4/20/2008 1:05:19 AM
Isopropylbenzer	iė	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
4-Isopropyltolue		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
4-Methyl-2-pent		ND	5.0		mg/Kg	10	4/20/2008 1:05:19 AM
Methylene chlor		ND	1.5		mg/Kg	10	4/20/2008 1:05:19 AM
n-Butylbenzene		0.72	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
n-Propylbenzen	9	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
sec-Butylbenzer		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Styrene		ND	0,50		mg/Kg	10	4/20/2008 1:05:19 AM
tert-Butylbanzer	ne.	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1,1,2-Tetrachi		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1,2,2-Tetrachl		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Tetrachloroethe		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
trans-1,2-DCE		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
trans-1,3-Dichlo	ropropene	ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2,3-Trichlorob		ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
1,2,4-Trichlorob		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1,1-Trichtoroe		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,1,2-Trichloroe		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Trichloroethene		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Trichlorofluorom		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
1,2,3-Trichlorop		ND	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
Vinyl chloride		ND	0.50		mg/Kg	10	4/20/2008 1:05:19 AM
Xylenes, Total		3.1	1.0		mg/Kg	10	4/20/2008 1:05:19 AM
•	hloroethane-d4	98.6	68.7-122		%REC	10	4/20/2008 1:05:19 AM
•	ofluorobenzene	93.1	79.3-126		%REC	10	4/20/2008 1:05:19 AM
	ofluoromethase	105	64.4-119		%REC	10	4/20/2008 1:05:19 AM
Surr: Toluene		101	86.5-121		%REC	10	4/20/2008 1:05:19 AM

#### Qualifiers:

- E Value above quantitation range
- Analyte detected below quantitation limits 1
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits S

\* Value exceeds Maximum Contaminant Level

..... Analyte detected in the associated Method Blank В

.. .....

- Holding times for preparation or analysis exceeded Н
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

CLIENT:		Western Refining S	outhwest, Gallup		Clier	nt Sai	mple ID:	BD-1	
Lab Order:		0804138			Co	llecti	on Date:	4/8/2008	
Project:		Evaporation Pond/A	tion Pond/Aeration Lagoon		D	ate R	eceived:	4/11/2008	
Lab ID:		0804138-20	-				Matrix:	SOIL	
Analyses			Result	PQL	Qual	Uni	ts	DF	Date Analyzed
-	00 CIC	15B: DIESEL RANG							Analyst: SCC
Diesel Rang			220000	5000		mg/k	(g	50	4/18/2008 11:41:56 PM
-	-	rganics (MRO)	ND	25000		mg/ł	-	50	4/18/2008 11:41:56 PM
Surr: DNC	-	gamee (mille)	0	61.7-135	s	%RE	-	50	4/18/2008 11:41:56 PM
	מפ חו	15B: GASOLINE RA	NGE						Analyst: NSE
			ND	100		mg/ł	(n	20	4/19/2008 2:23:16 AM
		rganics (GRO)	109	84-138		%RE	-	20	4/19/2008 2:23:16 AM
Sum BFB	\$		109	04-150			.0	24	-1, 10/2000 2.20.10 f ki
EPA METHO	DD 74	71: MERCURY							Analyst: SNV
Mercury			11	1.6		mg/H	<g< td=""><td>50</td><td>4/28/2008 2:54:28 PM</td></g<>	50	4/28/2008 2:54:28 PM
	הם רור	10B: SOIL METALS							Analyst: NM
			12	2.5		mg/ł	Ka	1	4/23/2008 8:09:42 AM
Arsenic Barium			420	1.0		mg/H	-	10	4/23/2008 9:24:19 AM
Cadmium			0.46	0.10		mg/r	-	1	4/23/2008 8:09:42 AM
			22	0.30		mg/r		1	4/23/2008 8:09:42 AM
Chromium			26	0.25		mg/i	-	1	4/28/2008 9:39:06 AM
Lead			ND	25		mg/ł	•	10	4/23/2008 9:24:19 AM
Selenium Silver			ND	0.25		mg/ł	-	1	4/28/2008 9:39:06 AM
			-						Analyst: JDC
		70C: SEMIVOLATIL	LS ND	, 30		mg/ł	(n	1	4/18/2008
Acenaphthe			ND	30		mg/l	-	1	4/18/2008
Acenaphthyl	iene		ND 1	30		mg/ł	-	1	4/18/2008
Aniline Anthracene			ND	30		mg/ł	-	1	4/18/2008
Animacene Azobenzene			ND	30		mg/ł		1	4/18/2008
			ND	30		mg/l		1	4/18/2008
Benz(a)anth		,	ND	30		mg/ł	-	1	4/18/2008
Benzo(a)pyr		00	ND	30		mg/l	•	1	4/18/2008
Benzo(b)fluc Benzo(a b i)			ND	75		mg/ł		1	4/18/2008
Benzo(g,h,i); Benzo(k)fluo			ND	30		mg/ł	-	1	4/18/2008
Benzo(k)fluo Benzoic acio		210	ND	50		mg/ł		1	4/18/2008
Benzyi alcoh			ND	30		mg/ł		1	4/18/2008
Bis(2-chloro		)methane	ND	30		mg/ł		1	4/18/2008
Bis(2-chloro)			ND	30		mg/ł		1	4/18/2008
Bis(2-chloroi	• •		ND	30		mg/ł		1	4/18/2008
Bis(2-ethylho			ND	75		mg/ł		1	4/18/2008
4-Bromophe			ND	30		mg/ł		1	4/18/2008
Butyl benzyl		•	ND	30		mg/ł	-	1	4/18/2008
Carbazole	Pricital		ND	30		mg/ł	-	1	4/18/2008
	nofhuir	benol	ND	75		mg/ł	-	1	4/18/2008
4-Chioro-3-n 4-Chioroanil			ND	75		mg/ł		1	4/18/2008
	*	Value exceeds Maximu	<u>.</u>		·			ected in the ass	ociated Method Blank
Qualifiers:									on or analysis exceeded
	E	Value above quantitatio			h		-	Contaminant Le	
	j	Analyte detected below					Reporting L		
	ND	Not Detected at the Rep		ite			coporting I		Page 69 of
	S	Spike recovery outside a	accepted recovery min	ווג הידי					

Date: 29-Apr-08

i.

CLIENT:	Western Refining Sou	thwest, Gallup		Clien	t Sample ID:	BD-1	
Lab Order:	0804138			Col	lection Date:	4/8/2008	
Project:	Evaporation Pond/Ae	ration Lagoon		Da	ate Received:	4/11/2008	
Lab ID:	0804138-20				Matrix:	SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	270C: SEMIVOLATILE	<u> </u>					Analyst: JDC
2-Chloronaphtha	lene	ND	38		mg/Kg	1	4/18/2008
2-Chlorophenol		ND	30		mg/Kg	1	4/16/2008
4-Chlorophenyl	phenyl ether	ND	30		mg/Kg	1	4/18/2008
Chrysene		48	30		mg/Kg	1	4/18/2008
Di-n-butyl phthal	ate	ND	75		mg/Kg	1	4/18/2008
Di-n-octyl phthal		ND	30		m <b>g/Kg</b>	1	4/18/2008
Dibenz(a,h)anth		ND	30		mg/Kg	1	4/18/2008
Dibenzofuran		ND	30		mg/Kg	1	4/18/2008
1,2-Dichloroben:	zene	ND	30		mg/Kg	1	4/18/2008
1,3-Dichloroben		ND	30		mg/Kg	1	4/18/2008
1,4-Dichloroben:		ND	30		mg/Kg	1	4/18/2008
3.3'-Dichlorober		ND	38		mg/Kg	1	4/18/2008
Diethyl phthalate		ND	30		mg/Kg	1	4/18/2008
Dimethyl phthala		ND	30		mg/Kg	1	4/18/2008
2,4-Dichlorophe		ND	30		mg/Kg	1	4/18/2008
2,4-Dimethylphe		ND	45		mg/Kg	1	4/18/2008
4,6-Dinitro-2-me		ND	75		mg/Kg	1	4/18/2008
2,4-Dinitropheno		ND	75		mg/Kg	1	4/18/2008
2,4-Dinitrotoluer		ND	75		mg/Kg	1	4/18/2008
2,6-Dinitrotoluer		ND	75		mg/Kg	1	4/18/2008
Fluoranthene		ND	38		mg/Kg	1	4/18/2008
		100	30		mg/Kg	1	4/18/2008
Fluorene	-D	ND	30		mg/Kg	1	4/18/2008
Hexachlorobenz		ND	30		mg/Kg	1	4/18/2008
Hexachlorobute		ND	30		mg/Kg	1	4/18/2008
Hexachlorocyclo Hexachloroethau		ND	30		mg/Kg	1	4/18/2008
		ND	38		mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)	pyrene	ND	75		mg/Kg	1	4/18/2008
Isophorone		540	38		mg/Kg	1	4/18/2008
2-Methylnaphtha	Neve	ND	75		mg/Kg	1	4/18/2008
2-Methylphenol	ما	30	30		mg/Kg	1	4/18/2008
3+4-Methylphen		ND	30		mg/Kg	1	4/18/2008
N-Nitrosodi-n-pr		ND	30		mg/Kg	1	4/18/2008
N-Nitrosodiphen	yanne	48	30		mg/Kg	1	4/18/2008
Naphthalene		40 ND	30		mg/Kg	1	4/18/2008
2-Nitroaniline		ND	30		mg/Kg	1	4/18/2008
3-Nitroaniline		ND	38		mg/Kg	1	4/18/2008
4-Nitroaniline		ND	30 75		mg/Kg	1	4/18/2008
Nitrobenzene			30		mg/Kg	1	4/18/2008
2-Nitrophenol		ND	30		mg/Kg mg/Kg	1	4/18/2008
4-Nitrophenol		ND				1	4/18/2008
Pentachlorophei	nol	ND	50		mg/Kg		4/18/2008
Phonanthrene		300	30		mg/Kg	1	

Value exceeds Maximum Contaminant Level Qualifiers: ٠ Value above quantitation range E

- Analyte detected below quantitation limits ł
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits S
- Analyte detected in the associated Method Blank в
- Holding times for preparation or analysis exceeded Н
- MCL Maximum Contaminant Level
- RL Reporting Limit

CLIENT:	Western Refining South	west, Gallup			nt Sample ID:		
Lab Order:	0804138			Co	llection Date:	4/8/2008	
Project:	Evaporation Pond/Aerat	ion Lagoon		D	ate Received:	4/11/2008	
Lab ID:	·0804138-20				Matrix:	SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
PA METHOD	8270C: SEMIVOLATILES		•				Analyst: JDC
Phenol		ND	30		mg/Kg	1	4/18/2008
Pyrene		56	30		mg/Kg	1	4/18/2008
Pyridine		ND	75		mg/Kg	1	4/18/2008
1,2,4-Trichlorob	enzene	ND	30		mg/Kg	1	4/18/2008
2,4,5-Trichlorop	henol	ND	30		mg/Kg	1	4/18/2008
2,4,6-Trichlorop	henol	ND	30		mg/Kg	1	4/18/2008
Surr: 2,4,6-Tr	ibromophenol	30.1	35.5-141	S	%REC	1	4/18/2008
Surr: 2-Fluore	oblphenyl	73.9	30.4-128		%REC	1	4/18/2008
Surr: 2-Fluoro	phenol	89.8	28,1-129		%REC	1	4/18/2008
Surr: 4-Terph	enyl-d14	35.9	34.6-151		%REC	1	4/18/2008
Surr: Nitrober		<b>8</b> 1.0	26.5-122		%REC	1	4/18/2008
Surr: Phenol-	d5	66.8	37.6-118		%REC	1	4/18/2008
PA METHOD 8	3260B: VOLATILES						Analyst: BDF
Benzene		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Toluene		1.3	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Ethylbenzene		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Methyl tert-butyl	ether (MTRE)	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2,4-Trimethylb	• •	2.9	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,3,5-Trimethylb		0.61	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dichloroetha		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dibromoetha		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Naphthalene		5.1	10		mg/Kg	10	4/20/2008 1:40:28 AM
1-Methylnaphtha	alone	23	2.0		mg/Kg	10	4/20/2008 1:40:28 AM
2-Methylnaphtha 2-Methylnaphtha		34	2.0		mg/Kg	10	4/20/2008 1:40:28 AM
z-weurynaphura Acetone	uene	ND	7.5		mg/Kg	10	4/20/2008 1:40:28 AM
		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Bromobenzene Bromodichiorom	ethane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Bromotorm		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Bromonorm		ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
2-Butanone		ND	5.0		mg/Kg	10	4/20/2008 1:40:28 AM
Z-Butanone Carbon disulfide		ND	5.0		mg/Kg	10	4/20/2008 1:40:28 AM
Carbon disumde Carbon tetrachio		ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
Carbon tetracino Chiorobenzene		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Chloroethane		ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
-		ND	0.50			10	4/20/2008 1:40:28 AM
Chloroform Chloromothana		ND	0.50		mg/Kg mg/Kg	10	4/20/2008 1:40:28 AM
Chloromethane					mg/Kg mg/Kg		
2-Chlorotoluene		ND	0.50		mg/Kg mg/Kg	10	4/20/2008 1:40:28 AM
4-Chlorotoluene		ND	0.50		mg/Kg mg/Kg	10	4/20/2008 1:40:28 AM
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
cis-1,3-Dichlorop	propene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM

Qualifiers: \* Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank

Date: 29-Apr-08

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

ł

CLIENT:	-	Southwest, Gallup			it Sample ID:		
Lab Order:	0804138				llection Date:		
Project:	Evaporation Pond	Aeration Lagoon		D	ate Received:		
Lab ID: 0804138-20				Matrix:		SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8260B: VOLATILES		· · · · · ·				Analyst: BDH
Dibromachloron		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Dibromomethan	ne	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dichloroben	zene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,3-Dichloroben		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,4-Dichloroben		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Dichlorodifluoro	methane	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1-Dichloroeth		ND	1,0		mg/Kg	10	4/20/2008 1:40:28 AM
1,1-Dichloroeth		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2-Dichloropro		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,3-Dichloropro		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
2,2-Dichloropro		ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
1,1-Dichloropro	•	ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
Hexachlorobuta		ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
2-Hexanone		ND	5.0		mg/Kg	10	4/20/2008 1:40:28 AM
isopropylbenzer	ne	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
4-Isopropyltolue		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
4-Methyl-2-pent		ND	5.0		mg/Kg	10	4/20/2008 1:40:28 AM
Methylene chlor		ND	1.5		mg/Kg	10	4/20/2008 1:40:28 AM
n-Butylbenzene		0.65	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
n-Propylbenzen		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
sec-Butylbenze		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Styrene		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
tert-Butylbenzer	ne	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1,1,2-Tetrachi		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1,2,2-Tetrach		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Tetrachloroethe		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
trans-1,2-DOE		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
trans-1,3-Dichio	ronronene	ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2,3-Trichlorob		ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
1,2,4-Trichlorob		ND	0 50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1,1-Trichloroe		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,1,2-Trichloroe		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Trichloroethene		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Trichlorofluoron		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
1,2,3-Trichlorop		ND	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
Vinyl chloride		ND	0.50		mg/Kg	10	4/20/2008 1:40:28 AM
Xylenes, Total		3.1	1.0		mg/Kg	10	4/20/2008 1:40:28 AM
•	hloroethane-d4	94.0	68,7-122		%REC	10	4/20/2008 1:40:28 AM
	ofluorobenzene	94.4	79.3-126		%REC	10	4/20/2008 1:40:28 AM
	ofluoromethane	99.4	64.4-119		%REC	10	4/20/2008 1:40:28 AM
Sur: Toluene		95.0	86.5-121		%REC	10	4/20/2008 1:40:28 AM

 Qualifiers:
 \*
 Value exceeds Maximum Contaminant Level

 E
 Value above quantitation range

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

i.

Lab Order:0804138Collection Date:4/8/2008 4:45:00 PMProject:Evaporation Pond/Aeration LagoonDate Received:4/11/2008Matrix:AOUEOUS	CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	EB040808	
Project: Evaporation Pond/Aeration Lagoon Date Received: 4/11/2008 Matrix: AOUEOUS			<b>Collection Date:</b>	4/8/2008 4	:45:00 PM
Matrix: AQUEOUS		Evaporation Pond/Aeration Lagoon	Date Received:	4/11/2008	
Lab ID: 0804138-21	Lab ID:	0804138-21	Matrix:	AQUEOUS	3

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Toluene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Ethylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2,4-Trimethylbenzene	ND	1.0		μg/L	1	4/19/2008 12:33:24 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dichloroethane (EDC)	ND	1.0		րց/Լ	1	4/19/2008 12:33:24 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Naphthalane	ND	2.0		µg/L	1	4/19/2008 12:33:24 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 12:33:24 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2008 12:33:24 PM
Acetone	ND	10		µg/L	1	4/19/2008 12:33:24 PM
Bromobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Bromotorm	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Bromomethane	ND	1.0		μg/L	1	4/19/2008 12:33:24 PM
2-Butanone	ND	10		µg/L	1	4/19/2008 12:33:24 PM
Carbon disulfide	ND	10		µg/L	1	4/19/2008 12:33:24 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Chlorobenzene Chloroethane	ND	2.0		μg/L	1	4/19/2008 12:33:24 PM
Chloroform	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
	ND	1.0		μg/L	1	4/19/2008 12:33:24 PM
Chloromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
cis-1,3-Dichloropropene	ND	2.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dibromo-3-chloropropane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
Dibromomethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dichlorobenzene	ND	1.0		μg/L	1	4/19/2008 12:33:24 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,4-Dichlorobenzene	ND	1.0		րց.ա րց/Լ	1	4/19/2008 12:33:24 PM
Dichlorodifiuoromethane	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,1-Dichloroethane	ND ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2008 12:33:24 PM
1,2-Dichioropropane		1.0		µg/L	, 1	4/19/2008 12:33:24 PM
1,3-Dichloropropane	ND	2.0		μg/L	1	4/19/2008 12:33:24 PM
2,2-Dichloropropane	ND ND	2.0		р9/с µ9/С	1	4/19/2008 12:33:24 PM
1,1-Dichloropropene		1.0		բց/ե բց/ե	1	4/19/2008 12:33:24 PM
Hexachlorobutadiene 2-Hexanone	ND ND	10		բց/ե	1	4/19/2008 12:33:24 PM

Qualifiers:

\*

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

CLIENT:	Western Refining S	Southwest, Gallup		Client San	nple ID: EB04080	8			
Lab Order:	0804138			Collectio	n Date: 4/8/2008	4:45:00 PM			
Project:	Evaporation Pond/	Aeration Lagoon	Date Received: 4/11/2008						
Lab ID:	b ID: 0804138-21 Mate								
Analyses		Result	PQL	Qual Unit	s DF	Date Analyzed			
EPA METHOD	8260B: VOLATILES					Analyst: BDH			
Isopropylbenze		ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
4-isopropyltolue		ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
4-Methyl-2-pent	anone	ND	10	µg/L	1	4/19/2008 12:33:24 PM			
Methylene Chlo	ríđe	ND	3.0	µg/L	1	4/19/2008 12:33:24 PM			
n-Butyibenzene		ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
n-Propylbenzen	e	ND	1.0	μ <b>g/</b> L	1	4/19/2008 12:33:24 PM			
sec-Butylbenze	ne	ND	1.0	μg/L.	1	4/19/2008 12:33:24 PM			
Styrene		ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
tert-Butylbenzer	ne	ND	1.0	µg/Ն	1	4/19/2008 12:33:24 PM			
1,1,1,2-Tetrach	loroethane	ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
1,1,2,2-Tetrach	loroethane	ND	2.0	µg/L	1	4/19/2008 12:33:24 PM			
Tetrachloroethe	ine (PCE)	ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
trans-1,2-DCE		ND	1.0	μg/L	1	4/19/2008 12:33:24 PM			
trans-1,3-Dichio	ropropene	ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
1,2,3-Trichlorob	enzene	ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
1,2,4-Trichlorob	enzene	ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
1,1,1-Trichloroe	thane	ND	1.0	μg/ <b>L</b>	1	4/19/2008 12:33:24 PM			
1,1,2-Trichloroe	thane	ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
Trichloroethene	(TCE)	NÐ	1.0	µg/L	1	4/19/2008 12:33:24 PM			
Trichlorofluorom	nethane	ND	1.0	µg/L	1	4/19/2008 12:33:24 PM			
1,2,3-Trichlorop	ropane	ND	2.0	µg/L	1	4/19/2008 12:33:24 PM			
Vinyl chloride		ND	1.0	µg/L.	1	4/19/2008 12:33:24 PM			
Xylenes, Total		ND	1.5	µg/L	1	4/19/2008 12:33:24 PM			
Surr: 1,2-Dict	hioroethane-d4	108	68.1-123	%RE0	C 1	4/19/2008 12:33:24 PM			
Surr: 4-Brome	ofluorobenzene	102	53.2-145	%REG	C 1	4/19/2008 12:33:24 PM			
Surr: Dibrome	ofluoromethane	101	68.5-119	%RE(	D 1	4/19/2008 12:33:24 PM			
Surr: Toluene	-d8	104	64-131	%RE(	C 1	4/19/2008 12:33:24 PM			

Date: 29-Apr-08

\_\_\_\_\_\_

j.

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

---

CLIENT:	Western	Refining Southwest, Gallup		Client	Sample ID:	EB040908	
Lab Order:	0804138			Coll	ection Date:	4/10/2008 7	7:35:00 AM
Project:	Evaporat	ion Pond/Aeration Lagoon		Dat	te Received:	4/11/2008	
Lab ID:	0804138					AQUEOUS	;
Analyses		Result	PQL	Qual 1	Units	DF	Date Analyzed
PA METHO	D 8260B: VOL	ATILES					Analyst: BDF
Benzene		ND	1.0	L.	Jg/L	1	4/19/2008 1:02:11 PM
Toluene		ND	1.0		ig/L	1	4/19/2008 1:02:11 PM
Ethvibenzen	e	ND	1.0		ıg/L	1	4/19/2008 1:02:11 PM
Methyl tert-b	utyl ether (MTBE	) ND	1.0		ig/L	1	4/19/2008 1:02:11 PM
1,2,4-Trimet	-	, ND	1.0		ig/L	1	4/19/2008 1:02:11 PM
1,3,5-Trimeti	•	ND	1.0		ig/L	1	4/19/2008 1:02:11 PM
	ethane (EDC)	ND	1.0		ig/L	1	4/19/2008 1:02:11 PM
	ethane (EDB)	ND	1.0		ig/L	1	4/19/2008 1:02:11 PM
Naphthalene		ND	2.0		ig/L	1	4/19/2008 1:02:11 PM
1-Methylnapl		ND	4.0		ig/L	1	4/19/2008 1:02:11 PM
2-Methylnapl		ND	4.0		ig/L	1	4/19/2008 1:02:11 PM
Acetone		ND	10		ig/L	1	4/19/2008 1:02:11 PM
Bromobenze	ne	ND	1.0		ig/L	1	4/19/2008 1:02:11 PM
Bromodichio		NÐ	1.0		ig/L	1	4/19/2008 1:02:11 PM
Bromoform		ND	1.0		g/L	1	4/19/2008 1:02:11 PM
Bromometha	ine	ND	1.0		g/L	1	4/19/2008 1:02:11 PM
2-Butanone		ND	10		g/L	i	4/19/2008 1:02:11 PM
Carbon disul	fide	ND	10		g/L	1	4/19/2008 1:02:11 PM
Carbon Tetra		ND	1.0		g/L	1	4/19/2008 1:02:11 PM
Chlorobenzei		ND	1,0		g/L	1	4/19/2008 1:02:11 PM
Chloroethane		ND	2.0		g/L	1	4/19/2008 1:02:11 PM
Chloroform	-	ND	1.0		g/L	1	4/19/2008 1:02:11 PM
Chlorometha	ne	ND	1.0		g/L	1	4/19/2008 1:02:11 PM
2-Chlorotolue		ND	1.0		g/L	.1	4/19/2008 1:02:11 PM
4-Chiorotolue		ND	1.0		g/L	1	4/19/2008 1:02:11 PM
cis-1,2-DCE		ND	1.0		g/L		4/19/2008 1:02:11 PM
cis-1,3-Dichle	nonconece	ND	1.0		g/L		4/19/2008 1:02:11 PM
-	3-chloropropane	ND	2.0		g/L		4/19/2008 1:02:11 PM
Dibromochlor	• •	ND	1.0		g/L.	1	4/19/2008 1:02:11 PM
Dibromometh		ND	1.0		g/L	1	4/19/2008 1:02:11 PM
1,2-Dichlorob		NÐ	1.0	-	g/L	1	4/19/2008 1:02:11 PM
1,3-Dichlorob		ND	1.0		g/L	1	4/19/2008 1:02:11 PM
1,4-Dichlorob		NÐ	1.0		g/L.	1	4/19/2008 1:02:11 PM
Dichlorodifluc		ND	1.0		g/L	1	4/19/2008 1:02:11 PM
1,1-Dichloroe		ND	1,0		g/L	1	4/19/2008 1:02:11 PM
1,1-Dichloroe		ND	1.0		g/L	1	4/19/2008 1:02:11 PM
1,2-Dichlorop		ND	1.0		g/L	1	4/19/2008 1:02:11 PM
1,3-Dichlorop	-	ND	1.0		ş. – g/L		4/19/2008 1:02:11 PM
2,2-Dichlorop		ND	2.0	-	g/L,		4/19/2008 1:02:11 PM
1,1-Dichlorop		ND	1.0		g/L		4/19/2008 1:02:11 PM
Hexachlorobutadiene		ND	1.0		g/L.		4/19/2008 1:02:11 PM
2-Hexanone		ND	10		g/L		4/19/2008 1:02:11 PM
Qualifiers:	* Value excee	ds Maximum Contaminant Lovel		В	Analyte detec	sted in the assoc	iated Method Blank
		e quantitation range		н Н			1 or analysis exceeded
		ected below quantitation limits			-	ontaminant Leve	
		d at the Reporting Limit		RL	Reporting Li		
		ery outside accepted recovery limits			in pointing Di		Page 75 of 1

----

# Hall Environmental Analysis Laboratory, Inc. Date: 29-Apr-0

Date: 29-Apr-08

S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining	Southwest, Gallup		Client Sample I		
Lab Order:	0804138			<ul> <li>Collection Dat</li> </ul>	te: 4/10/2008	8 7:35:00 AM
Project:	Evaporation Pond/	Aeration Lagoon		Date Receive	d: 4/11/2008	3
Lab ID:	0804138-22			Matri	x: AQUEOU	JS
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD	8260B: VOLATILES	• • • • • • • • • • • • • • • • • • •				Analyst: BDH
isopropylbenzer	ne	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
4-Isopropyitolue	e	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
4-Methyl-2-pent	tanone	ND	10	µg/L	1	4/19/2008 1:02:11 PM
Methylene Chlo	ride	ND	3.0	µg/L	1	4/19/2008 1:02:11 PM
n-Butylbenzene		ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
n-Propylbenzen	e	ND	1.0	μg/L	1	4/19/2008 1:02:11 PM
sec-Butylbenzer	ne	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
Styrene		ND	1.0	μg/L	1	4/19/2008 1:02;11 PM
tert-Butylbenzer	ne	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
1,1,1,2-Tetrachi	loroethane	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
1,1,2,2-Tetrach	loroethane	ND	2.0	µg/L	1	4/19/2008 1:02:11 PM
Tetrachloroethe	ne (PCE)	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
trans-1,2-DCE		ND	1.0	μg/L	1	4/19/2008 1:02:11 PM
trans-1,3-Dichlo	ropropene	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
1,2,3-Trichlorob	enzene	ND	1.0	μg/L	1	4/19/2008 1:02:11 PM
1,2,4-Trichlorob	enzene	ND	1.0	μg/L	1	4/19/2008 1:02:11 PM
1,1,1-Trichloroet	thane	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
1,1,2-Trichloroel	thane	ND	1.0	μg/L	1	4/19/2008 1:02:11 PM
Trichloroethene	(TCE)	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
Trichlorofluorom	ethane	ND	1.0	µg/L	1	4/19/2008 1:02:11 PM
1,2,3-Trichloropa	ropane	ND	2.0	μg/ί.	1	4/19/2008 1:02:11 PM
Vinyi chloride		ND	1.0	μg/L	1	4/19/2008 1:02:11 PM
Xylenes, Total		ND	1.5	µg/L	1	4/19/2008 1:02:11 PM
Surr: 1,2-Dich	nloroethane-d4	110	68,1-123	%REC	1	4/19/2008 1:02:11 PM
Surr: 4-Brome	ofluorobenzene	101	53.2-145	%REC	1	4/19/2008 1:02:11 PM
Surr; Dibromo	ofluoromethane	99.7	68.5-119	%REC	1	4/19/2008 1:02:11 PM
Surr: Toluene	-d8	97.9	64-131	%REC	1	4/19/2008 1:02:11 PM

----

Date: 29-Apr-08

j.

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

---

Date: 29-Apr-08

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID: EB041008
Lab Order:	0804138	Collection Date: 4/11/2008 8:35:00 AM
Project:	Evaporation Pond/Aeration Lagoon	Date Received: 4/11/2008
Lab ID:	0804138-23	Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
PA METHOD 8260B: VOLATILES				······	Analyst: BDI
Benzene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Toluene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
Ethylbenzene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,2,4-Trimethylbenzene	NÐ	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,2-Dibromoethane (EDB)	ND	1.0	µg∕t.	1	4/19/2008 1:31:01 PM
Naphthalene	ND	2.0	µg/L	1	4/19/2008 1:31:01 PM
1-Methylnaphthalene	ND	4.0	μg/Ł	1	4/19/2008 1:31:01 PM
2-Methylnaphthalene	ND	4.0	µg/L	1	4/19/2008 1:31:01 PM
Acatone	ND	10	µg/L	1	4/19/2008 1:31:01 PM
Bromobenzene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
Bromodichloromethane	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Bromoform	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Bromomethane	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
2-Butanone	ND	10	µg/L	1	4/19/2008 1:31:01 PM
Carbon disulfide	ND	10	µg/L	1	4/19/2008 1:31:01 PM
Carbon Tetrachloride	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Chlorobenzene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Chloroethane	ND	2.0	µg/L	1	4/19/2008 1:31:01 PM
Chloraform	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Chloromethane	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
2-Chlorotoluene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
4-Chlorotoluene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
cls-1,2-DCE	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
cls-1,3-Dichloropropene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	4/19/2008 1:31:01 PM
Dibromochloromethane	ND	1.0	μ <b>g/L</b>	1	4/19/2008 1:31:01 PM
Dibromomethane	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,2-Dichlorobenzene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,3-Dichlorobenzene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,4-Dichlorobenzene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
Dichlorodifluoromethane	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,1-Dichloroethane	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,1-Dichloroethene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,2-Dichloropropane	ND	1.0	<b>µg/L</b>	1	4/19/2008 1:31:01 PM
1,3-Dichloropropane	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
2,2-Dichloropropane	ND	2.0	μg/L	1	4/19/2008 1:31:01 PM
1,1-Dichloropropene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
Hexachlorobutadiene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
2-Hexanone	ND	10	μg/L	1	4/19/2008 1:31:01 PM

70

Qualifiers: \* Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- 3 Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

j.

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	EB041008	
Lab Order:	0804138	Collection Date:	4/11/2008	8:35:00 AM
Project:	Evaporation Pond/Aeration Lagoon	Date Received:	4/11/2008	
Lab ID:	0804138-23	Matrix:	AQUEOUS	3
	Descrit 1	POI Quel Unite	DF	Date Analyzed

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
PA METHOD 8260B: VOLATILES			<u> </u>		Analyst: BDH
Isopropylbenzene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
4-isopropyitoluene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
4-Methyl-2-pentanone	ND	10	µg/L	1	4/19/2008 1:31:01 PM
Methylene Chloride	ND	3.0	µg/L	1	4/19/2008 1:31:01 PM
n-Bulylbenzene	ND	1.0	µ <b>g</b> /L	1	4/19/2008 1:31:01 PM
n-Propylbenzene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
sec-Bulylbenzene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
Styrene	ND	1.0	μ <b>g</b> /L	1	4/19/2008 1:31:01 PM
tert-Butylbenzene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	1	4/19/2008 1:31:01 PM
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
trans-1,2-DCE	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,1,1-Trichloroethane	ND	1.0	μg/L	1	4/19/2008 1:31:01 PM
1,1,2-Trichloroethane	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Trichloroethene (TCE)	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Trichlorofluoromethane	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
1,2,3-Trichloropropane	ND	2.0	µg/L	1	4/19/2008 1:31:01 PM
Vinyl chloride	ND	1.0	µg/L	1	4/19/2008 1:31:01 PM
Xylenes, Total	ND	1.5	µg/L	1	4/19/2008 1:31:01 PM
Surr: 1,2-Dichloroethane-d4	110	68.1-123	%REC	1	4/19/2008 1:31:01 PM
Surr: 4-Bromofluorobenzene	106	53.2-145	%REC	1	4/19/2008 1:31:01 PM
Surr: Dibromofluoromethane	95.8	68.5-119	%REC	1	4/19/2008 1:31:01 PM
Surr: Toluene-d8	98.6	64-131	%REC	1	4/19/2008 1:31:01 PM

Oualific	rs:	
Quantity	1.9.	

Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Date: 29-Apr-08

ł

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID: Trip Blank
Lab Order:	0804138	Collection Date:
Project:	Evaporation Pond/Aeration Lagoon	Date Received: 4/11/2008
Lab ID:	0804138-24	Matrix: TRIP BLANK

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES		····.	·····		Analyst: BDI
Benzene	ND	1.0	μg/L	1	4/19/2008 1:59:54 PM
Toluene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Ethyłbenzene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Naphthalene	ND	2.0	µg/L	1	4/19/2008 1:59:54 PM
1-Methylnaphthalene	ND	4.0	µg/L	1	4/19/2008 1:59:54 PM
2-Methylnaphthalene	ND	4.0	μg/L	1	4/19/2008 1:59:54 PM
Acetone	ND	10	µg/⊑	1	4/19/2008 1:59:54 PM
Bromobenzene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Bromodichloromethane	ND	1.0	µg/L	1	4/19/2008 1;59:54 PM
Bromoform	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Bromomethane	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
2-Butanone	ND	10	μg/L	1	4/19/2008 1:59:54 PM
Carbon disulfide	ND	10	µg/L	1	4/19/2008 1:59:54 PM
Carbon Tetrachloride	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Chlorobenzene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Chloroethane	ND	2.0	µg/L	1	4/19/2008 1:59:54 PM
Chloroform	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Chloromethane	ND	1.0	μg/L	1	4/19/2008 1:59:54 PM
2-Chlorotoluene	ND	1.0	μ <b>g/L</b>	1	4/19/2008 1:59:54 PM
4-Chlorotoluene	ND	1.0	μg/L	1	4/19/2008 1:59:54 PM
cis-1,2-DCE	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	4/19/2008 1:59:54 PM
Dibromochloromethane	ND	1.0	μg/L	1	4/19/2008 1:59:54 PM
Dibromomethane	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,2-Dichlorobenzene	ND	1.0	μ <b>g/L</b>	1	4/19/2008 1:59:54 PM
1,3-Dichlorobenzene	ND	1.0	μg/L	1	4/19/2008 1:59:54 PM
1,4-Dichlorobenzene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Dichlorodifluoromethane	ND	1.0	μg/L	1	4/19/2008 1:59:54 PM
1,1-Dichloroethane	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,1-Dichloroethene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,2-Dichloropropane	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
1,3-Dichloropropane	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
2,2-Dichloropropane	ND	2.0	µg/L	1	4/19/2008 1:59:54 PM
1,1-Dichloropropene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
Hexachlorobutadiene	ND	1.0	µg/L	1	4/19/2008 1:59:54 PM
2-Hexanone	ND	10	µg/L	1	4/19/2008 1:59:54 PM

Qualifiers: \* Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

nп

 CLIENT:
 Western Refining Southwest, Gallup
 Client Sample ID: Trip Blank

 Lab Order:
 0804138
 Collection Date:

 Project:
 Evaporation Pond/Aeration Lagoon
 Date Received: 4/11/2008

 Lab ID:
 0804138-24
 Matrix: TRIP BLANK

ł

Date: 29-Apr-08

Analyses	Result	PQL	Qual	Uni <b>ts</b>	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES	· · · · · · · · · · · · · · · · · · ·	···· · · · ·				Anaiyst: BDF
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
4-Isopropyttoluene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2008 1:59:54 PM
Methylene Chloride	ND	3.0	1	µg/Լ	1	4/19/2008 1:59:54 PM
n-Butylbenzene	ND	1.0		µg/L	1	4/19/2008 1:59:54 PM
n-Propylbenzene	ND	1.0	J	µg/L	1	4/19/2008 1:59:54 PM
sec-Butylbenzene	ND	10	1	µg/L	1	4/19/2008 1:59:54 PM
Styrene	ND	1.0	1	µg/L	1	4/19/2008 1:59:54 PM
tert-Butylbenzene	ND	1.0	I	µg/L	1	4/19/2008 1:59:54 PM
1,1,1,2-Tetrachloroethane	ND	1.0	1	µg/L	1	4/19/2008 1:59:54 PM
1,1,2,2-Tetrachloroethane	ND	2.0	1	րց/Լ	1	4/19/2008 1:59:54 PM
Tetrachloroethene (PCE)	ND	1.0	1	µg/L	1	4/19/2008 1:59:54 PM
trans-1,2-DCE	ND	1.0	ł	µg/L	1	4/19/2008 1:59:54 PM
trans-1,3-Dichloropropene	ND	1.0	1	µg/L	1	4/19/2008 1:59:54 PM
1,2,3-Trichlorobenzene	ND	1.0	. 1	µg/L	1	4/19/2008 1:59:54 PM
1,2,4-Trichlorobenzene	ND	1.0	I	µg/L	1	4/19/2008 1:59:54 PM
1,1,1-Trichloroethane	ND	1.0	I	µg/L	1	4/19/2008 1:59:54 PM
1,1,2-Trichloroethane	ND	1.0	I	µg/L	1	4/19/2008 1:59:54 PM
Trichloroethene (TCE)	ND	1.0	ŀ	µg/L	1	4/19/2008 1:59:54 PM
Trichlorofluoromethane	ND	1.0	ŀ	ug/L	1	4/19/2008 1:59:54 PM
1,2,3-Trichloropropane	ND	2.0	ł	u <b>g/L</b>	1	4/19/2008 1:59:54 PM
Vinyl chloride	ND	1.0	ł	ug/L	1	4/19/2008 1:59:54 PM
Xylenes, Total	ND	1.5	ŀ	ug/L	1	4/19/2008 1:59:54 PM
Surr: 1,2-Dichloroethane-d4	109	68.1-123	4	%REC	1	4/19/2008 1:59:54 PM
Surr: 4-Bromofluorobenzene	102	53.2-145	9	%REC	1	4/19/2008 1:59:54 PM
Surr: Dibromofluoromethane	101	68.5-119	q	%REC	1	4/19/2008 1:59:54 PM
Surr: Toluene-d8	100	64-131	9	%REC	1	4/19/2008 1:59:54 PM

### Hall Environmental Analysis Laboratory, Inc.

Qualifiers:
-------------

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Page 80 of 128

CLIENT: Lab Order: Project:	Western Refining So 0804138 Evaporation Pond/A			Co	It Sample ID: Bection Date: ate Received:	4/8/2008 1	1:05:00 AM
Lab ID:	0804138-25				Matrix:	SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANG	E ORGANICS					Analyst: SCC
🖉 Diesel Range O	rganics (DRO)	120000	5000		mg/ <b>Kg</b>	50	4/17/2008 12:54:40 PM
Motor Oil Range	organics (MRO)	28000	25000		mg/Kg	50	4/17/2008 12:54:40 PM
Surr: DNOP		0	61.7-135	S	%REC	50	4/17/2008 12:54:40 PM
EPA METHOD	8015B: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range Organics (GRO)     ND		100		mg/Kg	20	4/19/2008 2:53:20 AM	
Surr: BFB		98.4	84-138		%REC	20	4/19/2008 2:53:20 AM
	7471: MERCURY						Analyst: SNV
Mercury		7.4	1.6		mg/Kg	50	4/28/2008 2:57:44 PM
	CON METALO						Analyst: NMC
	6010B: SOIL METALS	10	9.5		malla	1	4/23/2008 8:12:22 AM
Arsenic		18	2.5 0.20		mg/Kg	2	4/23/2008 9:27:00 AM
Barlum		81	0.20		mg/Kg ma/Ka	2	4/23/2008 8:12:22 AM
Cadmium		2.4 29	0.10		mg/Kg mg/Kg	1	4/23/2008 8:12:22 AM
Chromium		29 32	0.35		mg/Kg	1	4/28/2008 9:41:37 AM
Lesd		ND	5.0		mg/Kg	2	4/23/2008 9:27:00 AM
Selenium Silver		ND	0.25		mg/Kg	1	4/28/2008 9:41:37 AM
	ATU S	-e					Analyst: JDC
	8270C: SEMIVOLATILE	ND	30		mg/Kg	1	4/18/2008
Acenaphthene			30		mg/Kg mg/Kg	1	4/18/2008
Acenaphthylene		ND ND	30		mg/⊼g mg/Kg	1	4/18/2008
Aniline		ND	30		mg/Kg	1	4/18/2008
Anthracene		ND	30		mg/Kg	1	4/18/2008
Azobenzene		ND	30		mg/Kg	1	4/18/2008
Benz(a)anthrace	10 <b>8</b>	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene	these	ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluorant		ND	75		mg/Kg	1	4/18/2006
Benzo(g,h,i)pery Benzo(k)fluorant		ND	30		mg/Kg	1	4/18/2008
Benzoic acid	(IIGU¢	ND	50		mg/Kg	1	4/18/2008
		ND	30		mg/Kg	1	4/18/2008
Benzyl alcohol Bis(2-chloroetho	wv)methane	ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethy		ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroisop	-	ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)		ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl (		ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phti	-	ND	30		mg/Kg	1	4/18/2008
Carbazole	nunote	ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-meth	vinhenol	ND	75		mg/Kg	1	4/18/2008
4-Chloroaniline	wheelot	ND	75		mg/Kg	1	4/18/2008

Date: 29-Apr-08

i.

Qualifiers: \* Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 29-Apr-08

l.

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	AL2-1-HP	
Lab Order:	0804138	Collection Date:	4/8/2008 1	1:05:00 AM
Project:	<b>Evaporation Pond/Aeration Lagoon</b>	Date Received:	4/11/2008	
Lab ID:	0804138-25	Matrix:	SOIL	
	Rosult	POL Qual Units	ÐF	Date Analyzed

Analyses	Result	PQL Q	ual Units	ÐF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES					Analyst: JD0
2-Chloronaphthalene	ND	38	mg/Kg	1	4/18/2008
2-Chlorophenol	ND	30	mg/Kg	1	4/18/2008
4-Chlorophenyl phenyl ether	ND	30	mg/Kg	1	4/18/2008
Chrysene	42	30	mg/Kg	1	4/18/2008
Di-n-butyl phthalate	ND	75	mg/Kg	1	4/18/2008
Di-n-octyl phthalate	ND	30	mg/Kg	1	4/18/2008
Dibenz(a,h)anthracene	ND	30	mg/Kg	1	4/18/2008
Dibenzofuran	ND	30	mg/Kg	1	4/18/2008
1,2-Dichlorobenzene	ND	30	mg/Kg	1	4/18/2008
1,3-Dichlorobenzene	ND	30	mg/Kg	1	4/18/2008
1,4-Dichlorobenzene	ND	30	mg/Kg	1	4/18/2008
3,3'-Dichlorobenzidine	ND	38	mg/Kg	1	4/18/2008
Diethyl phthalate	ND	30	mg/Kg	1	4/18/2008
Dimethyl phthalate	ND	30	mg/Kg	1	4/18/2008
2,4-Dichlorophenol	ND	30	mg/Kg	1	4/18/2008
2,4-Dimethylphenol	ND	45	mg/Kg	1	4/18/2008
4,6-Dinitro-2-methylphenol	ND	75	mg/Kg	1	4/18/2008
2.4-Dinitrophenol	ND	75	mg/Kg	1	4/18/2008
2,4-Dinitrotoluene	ND	75	mg/Kg	1	4/18/2008
2,6-Dinitrotoluene	ND	75	mg/Kg	1	4/18/2008
Fluoranthene	ND	38	mg/Kg	1	4/18/2008
Fluorene	ND	30	mg/Kg	1	4/18/2008
Hexachlorobenzene	ND	30	mg/Kg	1	4/18/2008
Hexachlorobutadiene	ND	30	mg/Kg	1	4/18/2008
Hexachlorocyclopentadiene	ND	30	mg/Kg	1	4/18/2008
Hexachloroethane	ND	30	mg/Kg	1	4/18/2008
Indeno(1,2,3-cd)pyrene	ND	38	mg/Kg	1	4/18/2008
Isophorone	ND	75	mg/Kg	1	4/18/2008
2-Methylnaphthalene	ND	38	mg/Kg	1	4/18/2008
2-Methylphenol	ND	75	mg/Kg	1	4/18/2008
3+4-Methylphenol	99	30	mg/Kg	1	4/18/2008
N-Nltrosodi-n-propylamine	ND	30	mg/Kg	1	4/18/2008
N-Nitrosodiphenylamine	ND	30	mg/Kg	1	4/18/2008
Naphthalene	ND	30	mg/Kg	1	4/18/2008
2-Nitroaniline	ND	30	mg/Kg	1	4/18/2008
3-Nitroaniline	ND	30	mg/Kg	1	4/18/2008
4-Nitroantline	ND	38	mg/Kg	1	4/18/2008
Nitrobenzene	ND	75	mg/Kg	1	4/18/2008
2-Nitrophenol	ND	30	mg/Kg	1	4/18/2008
4-Nitrophenol	ND	30	mg/Kg	1	4/18/2008
Pentachlorophenol	ND	50	mg/Kg	1	4/18/2008
Phenanthrene	50	30	mg/Kg	1	4/18/2008

Qualifiers: Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

CLIENT:	Western Refining Southwest, Gallup			Clien	it Sample ID:	AL2-1-HP		
Lab Order:	0804138		<b>Collection Date:</b>		4/8/2008 1	1:05:00 AM		
Project:	Evaporation Pond/Aerat	ion Lagoon		Date Received: Matrix:		4/11/2008		
Lab ID:	0804138-25	-				SOIL		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed	
EPA METHOD	8270C: SEMIVOLATILES						Analyst: JDC	
Phenol		ND	30		mg/Kg	1	4/18/2008	
Pyrene		38	30		mg/Kg	1	4/18/2008	
Pyridine		ND	75		mg/Kg	1	4/18/2008	
1,2,4-Trichlorob	enzene	ND	30		mg/Kg	1	4/18/2008	
2,4,5-Trichlorop	henol	ND	30		mg/Kg	1	4/18/2008	
2,4,6-Trichlorop	henol	ND	30		mg/Kg	1	4/18/2008	
Surr: 2,4,6-Tr	ibromophenol	56.9	35.5-141		%REC	1	4/18/2008	
Surr: 2-Fluoro		81.4	30.4-128		%REC	1	4/18/2008	
Surr: 2-Fluoro		89.5	28.1-129		%REC	1	4/18/2008	
Surr: 4-Terph		52.3	34.6-151		%REC	1	4/18/2008	
Surr: Nitrober	•	60.9	26.5-122		%REC	1	4/18/2008	
Surr: Phenol-d5		69.9	37.6-118		%REC	1	4/18/2008	
ΡΑ ΜΕΤΉΟΟ 8	B260B: VOLATILES						Analyst: BDF	
Benzene		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
Toluene		0.60	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
Ethylbenzene		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
•	ether (MTRF)	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
Methyl tert-butyl ether (MTBE)		0.93	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
1,2-Dichloroetha		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
1,2-Dibromoetha	ane (CDD)	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM	
Naphthalene			2.0			10	4/20/2008 4:02:15 AM	
1-Methylnaphtha		2.5			mg/K <b>g</b> ma/Ka	10		
2-Methylnaphtha	nene	2.4	2.0		mg/Kg		4/20/2008 4:02:15 AM	
Acetone		ND	7.5		mg/Kg	10	4/20/2008 4:02:15 AM	
Bromobenzene		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
Bromodichlorom	ethane	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
Bromoform		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
Bromomethane		ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM	
2-Butanone		ND	5.0		mg/Kg	10	4/20/2008 4:02:15 AM	
Carbon disulfide	-1-1 a	ND	5.0		mg/Kg	10	4/20/2008 4:02:15 AM	
Carbon tetrachloride		ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM	
Chlorobenzene		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
Chloroethane		ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM	
Chloroform		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
Chloromethane		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
2-Chlorotoluene		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
4-Chlorotoluene		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
cis-1,2-DCE		ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
cis-1,3-Dichlorop	•	ND	0.50		mg/Kg	10	4/20/2008 4:02:15 AM	
1,2-Dibromo-3-cl	hloropropane	ND	1.0		mg/Kg	10	4/20/2008 4:02:15 AM	

Date: 29-Apr-08

i.

Qualifiers: \* Value exceeds Maximum Contaminant Level

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

CLIENT:	Western Refining Southwest, Gallup 0804138			Client Sample II	: AL2-1-H	L2-1-HP	
Lab Order:				Collection Date	n Date: 4/8/2008 11	1:05:00 AM	
Project:	Evaporation Pond/Ac	eration Lagoon		Date Received	d: 4/11/2008 ix: SOIL		
Lab ID:	0804138-25	ů.					
Analyses		Result	PQL	Qual Units	DF	Date Analyzed	
EPA METHOD	8260B: VOLATILES	<u> </u>		······································	• • •	Analyst: BDH	
Dibromochlorom		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
Dibromomethan	ê	ND	1.0	mg/Kg	10	4/20/2008 4:02:15 AM	
1,2-Dichloroben	zene	ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,3-Dichloroben	zene	ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,4-Dichloroben		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
Dichlorodifluoror	methane	NO	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,1-Dichloroetha	ane	ND	1.0	mg/Kg	10	4/20/2008 4:02:15 AM	
1,1-Dichloroethe	ene	ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1.2-Dichloroprop		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,3-Dichloroprop	bane	ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
2,2-Dichloroprop		ND	1.0	mg/Kg	10	4/20/2008 4:02:15 AM	
1,1-Dichloroprop		ND	1.0	mg/Kg	10	4/20/2008 4:02:15 AM	
Hexachlorobuta		ND	1.0	mg/Kg	10	4/20/2008 4:02:15 AM	
2-Hexanone		NÐ	5.0	mg/Kg	10	4/20/2008 4:02:15 AM	
Isopropylbenzene		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
4-isopropyitoluene		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
4-Methyl-2-pentanone		ND	5.0	mg/Kg	10	4/20/2008 4:02:15 AM	
Methylene chlori			1,5	mg/Kg	10	4/20/2008 4:02:15 AM	
n-Butylbenzene	-		0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
n-Propylbenzene	-		0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
sec-Butylbenzen		ND ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
Styrene		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
tert-Butylbenzen	e	ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,1,1,2-Tetrachic		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,1,2,2-Tetrachic		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
Tetrachlorcether		ND	0.50	m <b>ġ/Kg</b>	10	4/20/2008 4:02:15 AM	
trans-1,2-DCE		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
trans-1,3-Dichlor	ropropene	ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,2,3-Trichlorobe		ND	1.0	mg/Kg	10	4/20/2008 4:02:15 AM	
1,2,4-Trichlorobe		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,1,1-Trichloroethane		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
1,1,2-Trichloroethane		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
Trichloroethene (TCE)		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
Trichlorofluorom	elhane	ND	0.5 <b>0</b>	mg/Kg	10	4/20/2008 4:02:15 AM	
1,2,3-Trichloroph		ND	1.0	mg/Kg	10	4/20/2008 4:02:15 AM	
Vinyl chloride		ND	0.50	mg/Kg	10	4/20/2008 4:02:15 AM	
Xylenes, Total		1.9	1.0	mg/Kg	10	4/20/2008 4:02:15 AM	
Surr: 1,2-Dich	loroethane-d4	95.6	68.7-122	%REC	10	4/20/2008 4:02:15 AM	
Surr: 4-Bromo	fluorobenzene	94.9	79.3-126	%REC	10	4/20/2008 4:02:15 AM	
Surr: Dibromo	fluoromethane	96.1	64.4-119	%REC	10	4/20/2008 4:02:15 AM	
Surr: Toluene-	-d8	101	86.5-121	%REC	10	4/20/2008 4:02:15 AM	

Date: 29-Apr-08

\_\_\_\_\_

ł

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

<sup>\*</sup> Value exceeds Maximum Contaminant Level

CLIENT:	Western Refining Se	Western Refining Southwest, Gallup			it Sample 1D:	AL2-2-HP	
Lab Order: 0804138		•		Co	llection Date:	4/8/2008 3	:15:00 PM
Project:	Evaporation Pond/A	eration Lagoon			ate Received:		
-	-	ernden zußeen		<i>D</i>	Matrix:		
Lab ID:	0804138-26		BOL	0.1			
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
	8015B: DIESEL RANG						Analyst: SCC
Diesel Renge O	• • •	130000	5000		mg/Kg	50	4/17/2008 1:28:44 PM
Motor Oil Range Organics (MRO)		ND	25000		mg/Kg	50	4/17/2008 1:28:44 PM
Surr: DNOP		0	61.7-135	S	%REC	5 <b>0</b>	4/17/2008 1:28:44 PM
	8015B: GASOLINE RA	NGE					Analyst: NSE
	Organics (GRO)	ND	100		mg/Kg	20	4/19/2008 3:23:21 AM
Surr: BFB		104	84-138		%REC	20	4/19/2008 3:23:21 AM
							Analyst, ON
	7471: MERCURY		4.0			50	Analyst: SNV
Mercury		6.4	1.6		mg/Kg	50	4/28/2008 3:00:59 PM
EPA METHOD	6010B: SOIL METALS						Analyst: NMC
Arsenic		20	2.5		mg/Kg	1	4/23/2008 8:15:00 AM
Barium		300	1.0		mg/Kg	10	4/23/2008 9:29:41 AM
Cadmium		0.73	0.10		mg/Kg	1	4/23/2008 8:15:00 AM
Chromium		22	0.30		mg/Kg	1	4/23/2008 8:15:00 AM
Lead		39	0.25		mg/Kg	1	4/28/2008 9:44:15 AM
Selenium		ND	25		m <b>g/K</b> g	10	4/23/2008 9:29:41 AM
Silver		ND	0.25		mg/Kg	1	4/28/2008 9:44:15 AM
EPA METHOD (	8270C: SEMIVOLATILI	ŝ					Analyst: JDC
Acenaphthene		ND	30		mg/Kg	1	4/18/2008
Acenaphthylene	1	ND	30		mg/Kg	1	4/18/2008
Aniline		ND	30		mg/Kg	1	4/18/2008
Anthracene		ND	30		mg/Kg	1	4/18/2008
Azobenzene		ND	30		mg/Kg	1	4/18/2008
Benz(a)anthrace	ene	ND	30		mg/Kg	1	4/18/2008
Benzo(a)pyrene		ND	30		mg/Kg	1	4/18/2008
Benzo(b)fluoran	thene	ND	30		mg/Kg	1	4/18/2008
Benzo(g,h,i)pery	lene	ND	75		mg/Kg	1	4/18/2008
Benzo(k)fluorani	lhene	ND	30		mg/Kg	1	4/18/2008
Benzolc acid		ND	50		mg/Kg	1	4/18/2008
Benzyi alcohol		ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethoxy)methane		ND	30		mg/Kg	1	4/18/2008
Bis(2-chloroethyl)ether		ND	30		mg/Kg	1	4/18/2008
Bis(2-chlorolsopropyl)ether		ND	30		mg/Kg	1	4/18/2008
Bis(2-ethylhexyl)phthalate		ND	75		mg/Kg	1	4/18/2008
4-Bromophenyl phenyl ether		ND	30		mg/Kg	1	4/18/2008
Butyl benzyl phthalate		ND	30		mg/Kg	1	4/18/2008
Carbazole		ND	30		mg/Kg	1	4/18/2008
4-Chloro-3-methylphenol		ND	75		mg/Kg	1	4/18/2008
4-Chloroanlline		ND	75		mg/Kg	1	4/18/2008

Date: 29-Apr-08

l.

- Е Value above quantitation range
- Analyte detected below quantitation limits 1
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits s
- Analyte detected in the associated Method Blank В
- н Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit